

Cited References--Full Record

Article 1 of 1

MARK

HOLDINGS

**Author
Biography**

Fluorination of single-wall carbon nanotubes

Mickelson ET, Huffman CB, Rinzler AG, Smalley RE, Hauge RH, Margrave JL

CHEMICAL PHYSICS LETTERS

296 (1-2): 188-194 OCT 30 1998

Document type: Article	Language: English	Cited <u>References: 16</u>	Times <u>Cited: 121</u>	FIND RELATED RECORDS	<u>Explanation</u>
----------------------------------	--------------------------	---------------------------------------	-----------------------------------	----------------------	--------------------

Abstract:

Purified single-wall carbon nanotubes (SWNTs) were fluorinated at several different temperatures. Product stoichiometries were determined and electron microscopy was used to verify whether or not the fluorination was destructive of the tubes. SWNTs fluorinated at three different temperatures were then defluorinated using hydrazine. Raman spectroscopy and resistance measurements were utilized to verify whether or not the products of the defluorination were in fact SWNTs. It has been determined that the bulk of the SWNTs survive the fluorination process at temperatures up to 325 degrees C and that hydrazine can be employed as an effective defluorinating agent to regenerate the unfluorinated starting material. (C) 1998 Elsevier Science B.V. All rights reserved.

KeyWords Plus:

RAMAN-SCATTERING, DIAMETER

Addresses:

Margrave JL, Rice Univ, Rice Quantum Inst, MS-60,6100 Main St, Houston, TX 77005 USA

Rice Univ, Rice Quantum Inst, Houston, TX 77005 USA

Rice Univ, Dept Chem, Houston, TX 77005 USA

Rice Univ, Ctr Nanoscale & Technol, Houston, TX 77005 USA

Rice Univ, Dept Phys, Houston, TX 77005 USA

Publisher:

ELSEVIER SCIENCE BV, PO BOX 211, 1000 AE AMSTERDAM, NETHERLANDS

IDS Number:

133ZZ

ISSN:0009-2614

Article 1 of 1

Acceptable Use Policy

Copyright © 2003 Thomson ISI



Citing Articles--Summary

Fluorination of single-wall carbon nanotubes

Mickelson ET, Huffman CB, Rinzler AG, et al.

CHEMICAL PHYSICS LETTERS

296 (1-2): 188-194 OCT 30 1998

These documents in the database cite the above article:

SUBMIT MARKS

UNMARK PAGE

MARK ALL

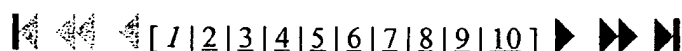
Results Page 1 (Articles 1 -- 10):

[1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10] ▶ ▶ ▶

Use the checkboxes to add individual articles to the Marked List. Be sure to click SUBMIT MARKS button before leaving page.

- ☒ Fagan SB, Mota R, Baierle RJ, et al.
Energetics and structural properties of adsorbed atoms and molecules on silicon-doped carbon nanotubes
MATER CHARACT 50 (2-3): 183-187 MAR 2003
- ☒ Huang JE, Li XH, Xu JC, et al.
Well-dispersed single-walled carbon nanotube/polyaniline composite films
CARBON 41 (14): 2731-2736 2003
- ☒ Marquis FDS
Fully integrated hybrid polymeric carbon nanotube composites
MATER SCI FORUM 437-4: 85-88 2003
- ☒ Park C, Crooks RE, Siochi EJ, et al.
Adhesion study of polyimide to single-wall carbon nanotube bundles by energy-filtered transmission electron microscopy
NANOTECHNOLOGY 14 (9): L11-L14 SEP 2003
- ☒ Xia HS, Wang Q, Qiu GH
Polymer-encapsulated carbon nanotubes prepared through ultrasonically initiated in situ emulsion polymerization
CHEM MATER 15 (20): 3879-3886 OCT 7 2003
- ☒ Seo JW, Couteau E, Umek P, et al.
Synthesis and manipulation of carbon nanotubes
NEW J PHYS 5: Art. No. 120 SEP 30 2003
- ☒ Jaffe RL
Quantum chemistry study of fullerene and carbon nanotube fluorination
J PHYS CHEM B 107 (38): 10378-10388 SEP 25 2003

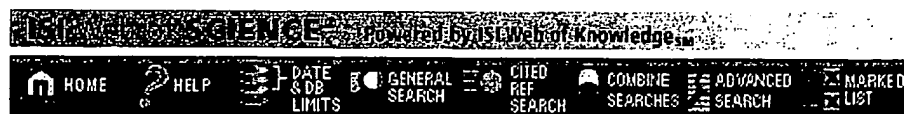
- ☒ Park KA, Choi YS, Lee YH, et al.
Atomic and electronic structures of fluorinated single-walled carbon nanotubes
PHYS REV B 68 (4): Art. No. 045429 JUL 15 2003
- ☒ Lu X, Yuan QH, Zhang QN
Sidewall epoxidation of single-walled carbon nanotubes: A theoretical prediction
ORG LETT 5 (19): 3527-3530 SEP 18 2003
- ☒ Park S, Srivastava D, Cho K
Generalized chemical reactivity of curved surfaces: Carbon nanotubes
NANO LETT 3 (9): 1273-1277 SEP 2003

SUBMIT MARKS**UNMARK PAGE****MARK ALL****Results Page 1 (Articles 1 -- 10):**

121 of 16,854,605 documents in the database cite the above article.

Acceptable Use Policy

Copyright © 2003 Thomson ISI



Citing Articles--Summary

Fluorination of single-wall carbon nanotubes

Mickelson ET, Huffman CB, Rinzler AG, et al.

CHEMICAL PHYSICS LETTERS

296 (1-2): 188-194 OCT 30 1998

These documents in the database cite the above article:

Results Page 2 (Articles 11 -- 20):

◀ ◀ ◀ [1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10] ▶ ▶ ▶

Use the checkboxes to add individual articles to the Marked List. Be sure to click SUBMIT MARKS button before leaving page.

- ☒ Li RF, Shang ZF, Wang GC, et al.
Theoretical investigation on the hydrogenation of armchair single-walled carbon nanotubes
J MOL STRUC-THEOCHEM 635: 203-210 SEP 18 2003
- ☒ Tasis D, Tagmatarchis N, Georgakilas V, et al.
Soluble carbon nanotubes
CHEM-EUR J 9 (17): 4001-4008 SEP 5 2003
- ☒ Plank NOV, Jiang LD, Cheung R
Fluorination of carbon nanotubes in CF4 plasma
APPL PHYS LETT 83 (12): 2426-2428 SEP 22 2003
- ☒ Lee JY, An KH, Heo JK, et al.
Fabrication of supercapacitor electrodes using fluorinated single-walled carbon nanotubes
J PHYS CHEM B 107 (34): 8812-8815 AUG 28 2003
- ☒ Zhu J, Kim JD, Peng HQ, et al.
Improving the dispersion and integration of single-walled carbon nanotubes in epoxy composites through functionalization
NANO LETT 3 (8): 1107-1113 AUG 2003
- ☒ Wu W, Zhang S, Li Y, et al.
PVK-modified single-walled carbon nanotubes with effective photoinduced electron transfer
MACROMOLECULES 36 (17): 6286-6288 AUG 26 2003
- ☒ Banerjee S, Wong SS
In situ quantum dot growth on multiwalled carbon nanotubes
J AM CHEM SOC 125 (34): 10342-10350 AUG 27 2003
- ☒ Lu X, Tian F, Xu X, et al.

Theoretical exploration of the 1,3-dipolar cycloadditions onto the sidewalls of (n,n) armchair single-wall carbon nanotubes

J AM CHEM SOC 125 (34): 10459-10464 AUG 27 2003

☒ Lu X, Tian F, Zhang QR

The [2+1] cycloadditions of dichlorocarbene, silylene, germylene, and oxycarbonylnitrene onto the sidewall of armchair (5,5) single-wall carbon nanotube

J PHYS CHEM B 107 (33): 8388-8391 AUG 21 2003

☒ Zhu WH, Minami N, Kazaoui S, et al.

Fluorescent chromophore functionalized single-wall carbon nanotubes with minimal alteration to their characteristic one-dimensional electronic states

J MATER CHEM 13 (9): 2196-2201 2003

SUBMIT MARKS

UNMARK PAGE

MARK ALL

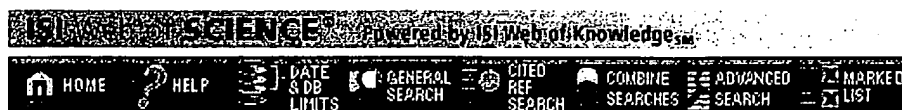
Results Page 2 (Articles 11 -- 20):

◀ ◀ [1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10] ▶ ▶ ▶

121 of 16,854,605 documents in the database cite the above article.

Acceptable Use Policy

Copyright © 2003 Thomson ISI



**Citing Articles--Summary****Fluorination of single-wall carbon nanotubes**

Mickelson ET, Huffman CB, Rinzler AG, et al.

CHEMICAL PHYSICS LETTERS

296 (1-2): 188-194 OCT 30 1998

These documents in the database cite the above article:

SUBMIT MARKS **UNMARK PAGE** **MARK ALL****Results Page 3 (Articles 21 -- 30):** [1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10] 

Use the checkboxes to add individual articles to the Marked List. Be sure to click **SUBMIT MARKS** button before leaving page.

- ☒ Duesberg GS, Roth S, Downes P, et al.
Modification of single-walled carbon nanotubes by hydrothermal treatment
CHEM MATER 15 (17): 3314-3319 AUG 26 2003

- ☒ de la Torre G, Blau W, Torres T
A survey on the functionalization of single-walled nanotubes. The chemical attachment of phthalocyanine moieties
NANOTECHNOLOGY 14 (7): 765-771 JUL 2003

- ☒ Huang WJ, Fernando S, Lin Y, et al.
Preferential solubilization of smaller single-walled carbon nanotubes in sequential functionalization reactions
LANGMUIR 19 (17): 7084-7088 AUG 19 2003

- ☒ Kovtyukhova NI, Mallouk TE, Pan L, et al.
Individual single-walled nanotubes and hydrogels made by oxidative exfoliation of carbon nanotube ropes
J AM CHEM SOC 125 (32): 9761-9769 AUG 13 2003

- ☒ Viswanathan G, Chakrapani N, Yang HC, et al.
Single-step in situ synthesis of polymer-grafted single-wall nanotube composites
J AM CHEM SOC 125 (31): 9258-9259 AUG 6 2003

- ☒ Soundarajan P, Patil A, Dai LM
Surface modification of aligned carbon nanotube arrays for electrochemical sensing applications
J VAC SCI TECHNOL A 21 (4): 1198-1201 JUL-AUG 2003

- ☒ Zhang MX, Zhang YF, Li Y, et al.
Theoretical studies of fluorine and hydrogen adsorbed on the armchair (5,5) carbon nanotubes with finite length

CHINESE J STRUC CHEM 22 (4): 447-453 2003

☒ Rakov EG

The chemistry and application of carbons nanotubes
USP KHIM+ 70 (10): 934-973 2001

☒ Holzinger M, Abraha J, Whelan P, et al.

Functionalization of single-walled carbon nanotubes with (R-)oxycarbonyl nitrenes
J AM CHEM SOC 125 (28): 8566-8580 JUL 16 2003

☒ Valentini L, Lozzi L, Cantalini C, et al.

Effects of oxygen annealing on gas sensing properties of carbon nanotube thin films
THIN SOLID FILMS 436 (1): 95-100 JUL 22 2003

SUBMIT MARKS

UNMARK PAGE

MARK ALL

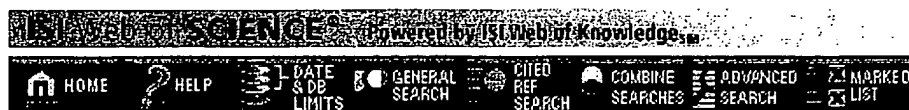
Results Page 3 (Articles 21 -- 30):

◀ ◀◀ ◀ [1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10] ▶ ▶▶ ▶

121 of 16,854,605 documents in the database cite the above article.

Acceptable Use Policy

Copyright © 2003 Thomson ISI



Citing Articles--Summary
Fluorination of single-wall carbon nanotubes
Mickelson ET, Huffman CB, Rinzler AG, et al.
CHEMICAL PHYSICS LETTERS
296 (1-2): 188-194 OCT 30 1998

These documents in the database cite the above article:

☐ SUBMIT MARKS ☐ UNMARK PAGE ☐ MARK ALL

Results Page 4 (Articles 31 -- 40):

◀ ◀ ◀ [1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10] ▶ ▶ ▶

Use the checkboxes to add individual articles to the Marked List. Be sure to click SUBMIT MARKS button before leaving page.

- ☒ Valentini L, Cantalini C, Lozzi L, et al.
Reversible oxidation effects on carbon nanotubes thin films for gas sensing applications
MAT SCI ENG C-BIO S 23 (4): 523-529 JUN 10 2003
- ☒ Lin T, Bajpai V, Ji T, et al.
Chemistry of carbon nanotubes
AUST J CHEM 56 (7): 635-651 2003
- ☒ Peng HQ, Gu ZN, Liu Y, et al.
Oxidative properties and chemical stability of fluoronanotubes in matrixes of binary inorganic compounds
J NANOSCI NANOTECHNO 3 (1-2): 87-92 FEB-APR 2003
- ☒ Pehrsson PE, Zhao W, Baldwin JW, et al.
Thermal fluorination and annealing of single-wall carbon nanotubes
J PHYS CHEM B 107 (24): 5690-5695 JUN 19 2003
- ☒ Cui JB, Burghard M, Kern K
Reversible sidewall osmylation of individual carbon nanotubes
NANO LETT 3 (5): 613-615 MAY 2003
- ☒ Banerjee S, Kahn MGC, Wong SS
Rational chemical strategies for carbon nanotube functionalization
CHEM-EUR J 9 (9): 1899-1908 MAY 9 2003
- ☒ Fagan SB, Mota R, Baierle RJ, et al.
Ab initio study of an organic molecule interacting with a silicon-doped carbon nanotube
DIAM RELAT MATER 12 (3-7): 861-863 MAR-JUL 2003
- ☒ Kang YJ, Taton TA

Micelle-encapsulated carbon nanotubes: A route to nanotube composites
J AM CHEM SOC 125 (19): 5650-5651 MAY 14 2003

☒ Ying YM, Saini RK, Liang F, et al.
Functionalization of carbon nanotubes by free radicals
ORG LETT 5 (9): 1471-1473 MAY 1 2003

☒ McEuen PL, Fuhrer MS, Park HK
Single-walled carbon nanotube electronics
IEEE T NANOTECHNOL 1 (1): 78-85 MAR 2002

SUBMIT MARKS

UNMARK PAGE

MARK ALL

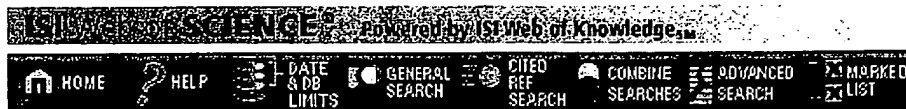
Results Page 4 (Articles 31 -- 40):

◀ ◀◀ ◀ [1|2|3|4|5|6|7|8|9|10] ▶ ▶▶ ▶▶▶

121 of 16,854,605 documents in the database cite the above article.

Acceptable Use Policy

Copyright © 2003 Thomson ISI



Citing Articles--Summary

Fluorination of single-wall carbon nanotubes

Mickelson ET, Huffman CB, Rinzler AG, et al.

CHEMICAL PHYSICS LETTERS

296 (1-2): 188-194 OCT 30 1998

These documents in the database cite the above article:

SUBMIT MARKS

UNMARK PAGE

MARK ALL



Results Page 5 (Articles 41 -- 50):

◀ ◀ ◀ [1|2|3|4|5|6|7|8|9|10] ▶ ▶ ▶

Use the checkboxes to add individual articles to the Marked List. Be sure to click SUBMIT MARKS button before leaving page.

- ☒ Ravindran S, Chaudhary S, Colburn B, et al.
Covalent coupling of quantum dots to multiwalled carbon nanotubes for electronic device applications
NANO LETT 3 (4): 447-453 APR 2003
- ☒ Huang WJ, Fernando S, Allard LF, et al.
Solubilization of single-walled carbon nanotubes with diamine-terminated oligomeric poly (ethylene glycol) in different functionalization reactions
NANO LETT 3 (4): 565-568 APR 2003
- ☒ Lee YS, Cho TH, Lee BK, et al.
Surface properties of fluorinated single-walled carbon nanotubes
J FLUORINE CHEM 120 (2): 99-104 APR 1 2003
- ☒ Saini RK, Chiang IW, Peng HQ, et al.
Covalent sidewall functionalization of single wall carbon nanotubes
J AM CHEM SOC 125 (12): 3617-3621 MAR 26 2003
- ☒ Della Negra F, Meneghetti M, Menna E
Microwave-assisted synthesis of a soluble single wall carbon nanotube derivative
FULLER NANOTUB CAR N 11 (1): 25-34 2003
- ☒ Herges R, Deichmann M, Wakita T, et al.
Synthesis of a chiral tube
ANGEW CHEM INT EDIT 42 (10): 1170-1172 2003
- ☒ Stevens JL, Huang AY, Peng HQ, et al.
Sidewall amino-functionalization of single-walled carbon nanotubes through fluorination and subsequent reactions with terminal diamines
NANO LETT 3 (3): 331-336 MAR 2003

- ☒ Gao X, Hu TJ, Liu LQ, et al.
Self-assembly of modified carbon nanotubes in toluene
CHEM PHYS LETT 370 (5-6): 661-664 MAR 21 2003
- ☒ An KH, Parka KA, Heo JG, et al.
Structural transformation of fluorinated carbon nanotubes induced by in situ electron-beam irradiation
J AM CHEM SOC 125 (10): 3057-3061 MAR 12 2003
- ☒ Pan HL, Liu LQ, Guo ZX, et al.
Carbon nanotubols from mechanochemical reaction
NANO LETT 3 (1): 29-32 JAN 2003

SUBMIT MARKS**UNMARK PAGE****MARK ALL****Results Page 5 (Articles 41 -- 50):** [1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10] 

121 of 16,854,605 documents in the database cite the above article.

Acceptable Use Policy

Copyright © 2003 Thomson ISI



Citing Articles--Summary
Fluorination of single-wall carbon nanotubes
Mickelson ET, Huffman CB, Rinzler AG, et al.
CHEMICAL PHYSICS LETTERS
296 (1-2): 188-194 OCT 30 1998

These documents in the database cite the above article:

SUBMIT MARKS **UNMARK PAGE** **MARK ALL**

Results Page 6 (Articles 51 -- 60):

◀ ◀ ◀ [1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10] ▶ ▶ ▶

Use the checkboxes to add individual articles to the Marked List. Be sure to click **SUBMIT MARKS** button before leaving page.

- ☒ Sano M
Toward carbon nanotube supramolecular chemistry
KOBUNSHI RONBUNSHU 59 (10): 565-570 2002
- ☒ Khabashesku VN, Billups WE, Margrave JL
Fluorination of single-wall carbon nanotubes and subsequent derivatization reactions
ACCOUNTS CHEM RES 35 (12): 1087-1095 DEC 2002
- ☒ Niyogi S, Hamon MA, Hu H, et al.
Chemistry of single-walled carbon nanotubes
ACCOUNTS CHEM RES 35 (12): 1105-1113 DEC 2002
- ☒ Zhu WH, Zhu SQ, Tian H
Advances in structure modification of single wall carbon nanotubes
CHINESE J ORG CHEM 22 (12): 964-973 DEC 2002
- ☒ Lu X, Tian F, Wang NQ, et al.
Organic functionalization of the sidewalls of carbon nanotubes by Diels-Alder reactions: A theoretical prediction
ORG LETT 4 (24): 4313-4315 NOV 28 2002
- ☒ Kahn MGC, Banerjee S, Wong SS
Solubilization of oxidized single-walled carbon nanotubes in organic and aqueous solvents through organic derivatization
NANO LETT 2 (11): 1215-1218 NOV 2002
- ☒ Basiuk EV, Rybak-Akimova EV, Basiuk VA, et al.
Adsorption modification of single-walled carbon nanotubes with tetraazaannulene macrocyclic complexes
NANO LETT 2 (11): 1249-1252 NOV 2002

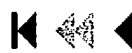
- ☒ Lu X, Tian F, Feng YB, et al.
Sidewall oxidation and complexation of carbon nanotubes by base-catalyzed cycloaddition of transition metal oxide: A theoretical prediction
NANO LETT 2 (11): 1325-1327 NOV 2002
- ☒ Cai LT, Bahr JL, Yao YX, et al.
Ozonation of single-walled carbon nanotubes and their assemblies on rigid self-assembled monolayers
CHEM MATER 14 (10): 4235-4241 OCT 2002
- ☒ Nunzi F, Mercuri F, Sgamellotti A, et al.
The coordination chemistry of carbon nanotubes: a density functional study through a cluster model approach
J PHYS CHEM B 106 (41): 10622-10633 OCT 17 2002
-

SUBMIT MARKS

UNMARK PAGE

MARK ALL

Results Page 6 (Articles 51 -- 60):

 [1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |



Citing Articles--Summary
Fluorination of single-wall carbon nanotubes
Mickelson ET, Huffman CB, Rinzler AG, et al.
CHEMICAL PHYSICS LETTERS
296 (1-2): 188-194 OCT 30 1998

These documents in the database cite the above article:

☐ SUBMIT MARKS ☐ UNMARK PAGE ☐ MARK ALL

Results Page 7 (Articles 61 -- 70):

◀ ◀ ◀ [1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10] ▶ ▶ ▶

Use the checkboxes to add individual articles to the Marked List. Be sure to click SUBMIT MARKS button before leaving page.

- ☒ Park C, Ounaies Z, Watson KA, et al.
Dispersion of single wall carbon nanotubes by in situ polymerization under sonication
CHEM PHYS LETT 364 (3-4): 303-308 OCT 4 2002
- ☒ Geng HZ, Rosen R, Zheng B, et al.
Fabrication and properties of composites of poly(ethylene oxide) and functionalized carbon nanotubes
ADV MATER 14 (19): 1387-1390 OCT 2 2002
- ☒ Gu Z, Peng H, Hauge RH, et al.
Cutting single-wall carbon nanotubes through fluorination
NANO LETT 2 (9): 1009-1013 SEP 2002
- ☒ Banerjee S, Wong SS
Structural characterization, optical properties, and improved solubility of carbon nanotubes functionalized with Wilkinson's catalyst
J AM CHEM SOC 124 (30): 8940-8948 JUL 31 2002
- ☒ Bahr JL, Tour JM
Covalent chemistry of single-wall carbon nanotubes
J MATER CHEM 12 (7): 1952-1958 2002
- ☒ Ivanovskii AL
Non-carbon nanotubes: Synthesis and simulation
USP KHIM+ 71 (3): 203-224 2002
- ☒ Sinnott SB
Chemical functionalization of carbon nanotubes
J NANOSCI NANOTECHNO 2 (2): 113-123 APR 2002

☒ Hirsch A

Functionalization of single-walled carbon nanotubes
ANGEW CHEM INT EDIT 41 (11): 1853-1859 2002

☒ Touhara H, Inahara J, Mizuno T, et al.

Property control of new forms of carbon materials by fluorination
J FLUORINE CHEM 114 (2): 181-188 APR 28 2002

☒ An KH, Heo JG, Jeon KG, et al.

X-ray photoemission spectroscopy study of fluorinated single-walled carbon nanotubes
APPL PHYS LETT 80 (22): 4235-4237 JUN 3 2002

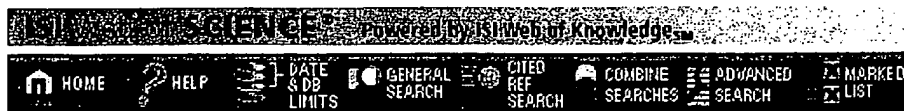
SUBMIT MARKS**UNMARK PAGE****MARK ALL****Results Page 7 (Articles 61 -- 70):**

◀ ◀ [1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10] ▶ ▶ ▶

121 of 16,854,605 documents in the database cite the above article.

Acceptable Use Policy

Copyright © 2003 Thomson ISI



Citing Articles--Summary

Fluorination of single-wall carbon nanotubes

Mickelson ET, Huffman CB, Rinzler AG, et al.

CHEMICAL PHYSICS LETTERS

296 (1-2): 188-194 OCT 30 1998

These documents in the database cite the above article:

SUBMIT MARKS **UNMARK PAGE** **MARK ALL**

Results Page 8 (Articles 71 -- 80):

◀ ◀◀ [1|2|3|4|5|6|7|8|9|10] ▶▶ ▶

Use the checkboxes to add individual articles to the Marked List. Be sure to click **SUBMIT MARKS** button before leaving page.

- ☒ Marcoux PR, Schreiber J, Batail P, et al.
A spectroscopic study of the fluorination and defluorination reactions on single-walled carbon nanotubes
PHYS CHEM CHEM PHYS 4 (11): 2278-2285 2002
- ☒ Hayashi T, Terrones M, Scheu C, et al.
NanoTeflons: Structure and EELS characterization of fluorinated carbon nanotubes and nanofibers
NANO LETT 2 (5): 491-496 MAY 2002
- ☒ Root MJ
Comparison of fluorofullerenes with carbon monofluorides and fluorinated carbon single wall nanotubes: Thermodynamics and electrochemistry
NANO LETT 2 (5): 541-543 MAY 2002
- ☒ Liu LQ, Guo ZX, Dai LM, et al.
Organic modification of carbon nanotubes
CHINESE SCI BULL 47 (6): 441-447 MAR 2002
- ☒ Yang YL, Zhang J, Nan XL, et al.
Toward the chemistry of carboxylic single-walled carbon nanotubes by chemical force microscopy
J PHYS CHEM B 106 (16): 4139-4144 APR 25 2002
- ☒ Kooi SE, Schlecht U, Burghard M, et al.
Electrochemical modification of single carbon nanotubes
ANGEW CHEM INT EDIT 41 (8): 1353-1355 2002
- ☒ Yudanov NF, Okotrub AV, Shubin YV, et al.
Fluorination of arc-produced carbon material containing multiwall nanotubes

CHEM MATER 14 (4): 1472-1476 APR 2002

☒ Hamon MA, Hui H, Bhowmik P, et al.

Ester-functionalized soluble single-walled carbon nanotubes

APPL PHYS A-MATER 74 (3): 333-338 MAR 2002

☒ Steuerma DW, Star A, Narizzano R, et al.

Interactions between conjugated polymers and single-walled carbon nanotubes

J PHYS CHEM B 106 (12): 3124-3130 MAR 28 2002

☒ Ruhle M, Seeger T, Redlich P, et al.

Novel SiOx-coated carbon nanotubes

J CERAM PROCESS RES 3 (1): 1-5 2002

SUBMIT MARKS

UNMARK PAGE

MARK ALL

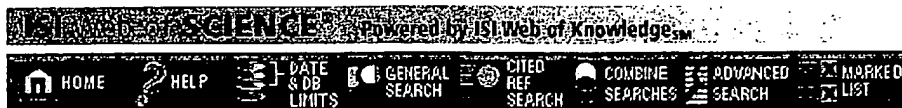
Results Page 8 (Articles 71 -- 80):

◀ ◀ [1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10] ▶ ▶ ▶

121 of 16,854,605 documents in the database cite the above article.

Acceptable Use Policy

Copyright © 2003 *Thomson ISI*


**Citing Articles--Summary****Fluorination of single-wall carbon nanotubes**

Mickelson ET, Huffman CB, Rinzler AG, et al.

CHEMICAL PHYSICS LETTERS

296 (1-2): 188-194 OCT 30 1998

These documents in the database cite the above article:

SUBMIT MARKS**UNMARK PAGE****MARK ALL****Results Page 9 (Articles 81 -- 90):** [1|2|3|4|5|6|7|8|9|10]

Use the checkboxes to add individual articles to the Marked List. Be sure to click SUBMIT MARKS button before leaving page.

☒ Lu X, Zhang LL, Xu X, et al.Can the sidewalls of single-wall carbon nanotubes be ozonized?

J PHYS CHEM B 106 (9): 2136-2139 MAR 7 2002

☒ Banerjee S, Wong SSFunctionalization of carbon nanotubes with a metal-containing molecular complex

NANO LETT 2 (1): 49-53 JAN 2002

☒ Khare BN, Meyyappan M, Cassell AM, et al.Functionalization of carbon nanotubes using atomic hydrogen from a glow discharge

NANO LETT 2 (1): 73-77 JAN 2002

☒ Gavalas VG, Andrews R, Bhattacharyya D, et al.Carbon nanotube sol-gel composite materials

NANO LETT 1 (12): 719-721 DEC 2001

☒ Azamian BR, Coleman KS, Davis JJ, et al.Directly observed covalent coupling of quantum dots to single-wall carbon nanotubes

CHEM COMMUN (4): 366-367 2002

☒ Peng HQ, Gu ZN, Yang JP, et al.Fluorotubes as cathodes in lithium electrochemical cells

NANO LETT 1 (11): 625-629 NOV 2001

☒ Koshio A, Yudasaka M, Zhang M, et al.A simple way to chemically react single-wall carbon nanotubes with organic materials using ultrasonication

NANO LETT 1 (7): 361-363 JUL 2001

☒ Zhao W, Song CH, Zheng B, et al.

Thermal recovery behavior of fluorinated single-walled carbon nanotubes
J PHYS CHEM B 106 (2): 293-296 JAN 17 2002

☒ Ni B, Andrews R, Jacques D, et al.

A combined computational and experimental study of ion-beam modification of carbon nanotube bundles

J PHYS CHEM B 105 (51): 12719-12725 DEC 27 2001

☒ Bettinger HF, Kudin KN, Scuseria GE

Thermochemistry of fluorinated single wall carbon nanotubes

J AM CHEM SOC 123 (51): 12849-12856 DEC 26 2001

SUBMIT MARKS

UNMARK PAGE

MARK ALL

Results Page 9 (Articles 81 -- 90):

◀◀◀ [1|2|3|4|5|6|7|8|9|10] ▶▶▶

121 of 16,854,605 documents in the database cite the above article.

Acceptable Use Policy

Copyright © 2003 Thomson ISI



Citing Articles--Summary
Fluorination of single-wall carbon nanotubes
Mickelson ET, Huffman CB, Rinzler AG, et al.
CHEMICAL PHYSICS LETTERS
296 (1-2): 188-194 OCT 30 1998

These documents in the database cite the above article:

☐ SUBMIT MARKS ☐ UNMARK PAGE ☐ MARK ALL



Results Page 10 (Articles 91 -- 100):

◀ ◀◀ ◀ [1|2|3|4|5|6|7|8|9|10] ▶ ▶▶ ▶▶▶

Use the checkboxes to add individual articles to the Marked List. Be sure to click SUBMIT MARKS button before leaving page.

- ☒ Kudin KN, Scuseria GE, Yakobson BI
C2F, BN, and C nanoshell elasticity from ab initio computations
PHYS REV B 64 (23): Art. No. 235406 DEC 15 2001
- ☒ Mews A, Jiang CY, Schuessler T, et al.
Raman investigation of single oxidized carbon nanotubes
ISRAEL J CHEM 41 (1): 15-22 2001
- ☒ Hamon MA, Hu H, Bhowmik P, et al.
End-group and defect analysis of soluble single-walled carbon nanotubes
CHEM PHYS LETT 347 (1-3): 8-12 OCT 19 2001
- ☒ Sinnott SB, Andrews R
Carbon nanotubes: Synthesis, properties, and applications
CRIT REV SOLID STATE 26 (3): 145-249 2001
- ☒ Goldshleger NF
Fullerenes and fullerene-based materials in catalysis
FULLERENE SCI TECHN 9 (3): 255-280 2001
- ☒ Bahr JL, Yang JP, Kosynkin DV, et al.
Functionalization of carbon nanotubes by electrochemical reduction of aryl diazonium salts: A bucky paper electrode
J AM CHEM SOC 123 (27): 6536-6542 JUL 11 2001
- ☒ Dai LM, Mau AWH
Controlled synthesis and modification of carbon nanotubes and C-60: Carbon nanostructures for advanced polymer composite materials
ADV MATER 13 (12-13): 899-+ JUL 4 2001

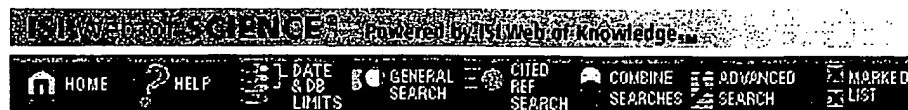
- ☒ Amkreutz M, Jungnickel G, Seifert G, et al.
On the structural and electronic properties of fluorinated carbon allotropes
NEW DIAM FRONT C TEC 11 (3): 207-220 2001
- ☒ Seeger T, Redlich P, Grobert N, et al.
SiO_x-coating of carbon nanotubes at room temperature
CHEM PHYS LETT 339 (1-2): 41-46 MAY 4 2001
- ☒ Star A, Stoddart JF, Steuerman D, et al.
Preparation and properties of polymer-wrapped single-walled carbon nanotubes
ANGEW CHEM INT EDIT 40 (9): 1721-1725 2001

SUBMIT MARKS**UNMARK PAGE****MARK ALL****Results Page 10 (Articles 91 -- 100):** [1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10] 

121 of 16,854,605 documents in the database cite the above article.

Acceptable Use Policy

Copyright © 2003 Thomson ISI



Citing Articles--Summary
Fluorination of single-wall carbon nanotubes
Mickelson ET, Huffman CB, Rinzler AG, et al.
CHEMICAL PHYSICS LETTERS
296 (1-2): 188-194 OCT 30 1998

These documents in the database cite the above article:

☐ SUBMIT MARKS ☐ UNMARK PAGE ☐ MARK ALL

Results Page 11 (Articles 101 -- 110):

◀ ◀ ◀ [11 | 12 | 13] ▶ ▶ ▶

Use the checkboxes to add individual articles to the Marked List. Be sure to click SUBMIT MARKS button before leaving page.

- ☒ Chen QD, Dai LM, Gao M, et al.
Plasma activation of carbon nanotubes for chemical modification
J PHYS CHEM B 105 (3): 618-622 JAN 25 2001
- ☒ Kudin KN, Bettinger HF, Scuseria GE
Fluorinated single-wall carbon nanotubes
PHYS REV B 63 (4): Art. No. 045413 JAN 15 2001
- ☒ Bahr JL, Mickelson ET, Bronikowski MJ, et al.
Dissolution of small diameter single-wall carbon nanotubes in organic solvents?
CHEM COMMUN (2): 193-194 2001
- ☒ Yudanov NF, Okotrub AV, Bulusheva LG, et al.
Synthesis and characterization of fluorinated carbon material containing multilayer nanoparticles
RUSS J INORG CHEM+ 45 (12): 1809-1818 DEC 2000
- ☒ Gol'dshleger NF, Moravskii AP
Use of fullerenes and fullerene-containing materials in catalysis: A review
PETROL CHEM+ 40 (6): 365-377 NOV-DEC 2000
- ☒ Breslavskaya NN, D'yachkov PN
Stereospecificity of fluorination of nanotubes C_nF_k (n=160-165, k=1-18)
RUSS J INORG CHEM+ 45 (11): 1685-1692 NOV 2000
- ☒ Barrera EV
Key methods for developing single-wall nanotube composites
JOM-J MIN MET MAT S 52 (11): A38-A42 Suppl. S NOV 2000
- ☒ Kirin DV, Breslavskaya NN, D'yachkov PN
Heterojunctions based on chemically modified carbon nanotubes

DOKL PHYS CHEM 374 (1-3): 161-166 SEP 2000

☒ Kelly KF, Mickelson ET, Hauge RH, et al.

Nanoscale imaging of chemical interactions: Fluorine on graphite

P NATL ACAD SCI USA 97 (19): 10318-10321 SEP 12 2000

☒ Seifert G, Kohler T, Frauenheim T

Molecular wires, solenoids, and capacitors by sidewall functionalization of carbon nanotubes

APPL PHYS LETT 77 (9): 1313-1315 AUG 28 2000

SUBMIT MARKS

UNMARK PAGE

MARK ALL

Results Page 11 (Articles 101 – 110):

⏮ ⏪ ⏩ ⏭ [11 | 12 | 13] ⏮ ⏭ ⏭ ⏭

121 of 16,854,605 documents in the database cite the above article.

Acceptable Use Policy

Copyright © 2003 Thomson ISI



Citing Articles--Summary
Fluorination of single-wall carbon nanotubes
Mickelson ET, Huffman CB, Rinzler AG, et al.
CHEMICAL PHYSICS LETTERS
296 (1-2): 188-194 OCT 30 1998

These documents in the database cite the above article:

☐ SUBMIT MARKS ☐ UNMARK PAGE ☐ MARK ALL

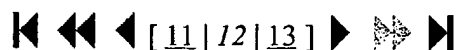
Results Page 12 (Articles 111 – 120):

◀ ◀ ◀ [11 | 12 | 13] ▶ ▶ ▶

Use the checkboxes to add individual articles to the Marked List. Be sure to click SUBMIT MARKS button before leaving page.

- ☒ Riggs JE, Guo ZX, Carroll DL, et al.
Strong luminescence of solubilized carbon nanotubes
J AM CHEM SOC 122 (24): 5879-5880 JUN 21 2000
- ☒ Peng S, Cho KJ
Chemical control of nanotube electronics
NANOTECHNOLOGY 11 (2): 57-60 JUN 2000
- ☒ Okotrub AV, Yudanov NF, Chuvilin AL, et al.
Fluorinated cage multiwall carbon nanoparticles
CHEM PHYS LETT 322 (3-4): 231-236 MAY 19 2000
- ☒ Bauschlicher CW
Hydrogen and fluorine binding to the sidewalls of a (10,0) carbon nanotube
CHEM PHYS LETT 322 (3-4): 237-241 MAY 19 2000
- ☒ Ellenbogen JC, Love JC
Architectures for molecular electronic computers: 1. Logic structures and an adder designed from molecular electronic diodes
P IEEE 88 (3): 386-426 MAR 2000
- ☒ Touhara H, Okino F
Property control of carbon materials by fluorination
CARBON 38 (2): 241-267 2000
- ☒ Kelly KF, Chiang IW, Mickelson ET, et al.
Insight into the mechanism of sidewall functionalization of single-walled nanotubes: an STM study
CHEM PHYS LETT 313 (3-4): 445-450 NOV 12 1999

- ☒ Boul PJ, Liu J, Mickelson ET, et al.
Reversible sidewall functionalization of buckytubes
CHEM PHYS LETT 310 (3-4): 367-372 SEP 3 1999
- ☒ Grobert N
Fullerenes and nanotubes: Materials of the next century?
NACHR CHEM TECH LAB 47 (7): 768-+ JUL 1999
- ☒ Mickelson ET, Chiang IW, Zimmerman JL, et al.
Solvation of fluorinated single-wall carbon nanotubes in alcohol solvents
J PHYS CHEM B 103 (21): 4318-4322 MAY 27 1999

SUBMIT MARKS**UNMARK PAGE****MARK ALL****Results Page 12 (Articles 111 -- 120):** [11 | 12 | 13]

121 of 16,854,605 documents in the database cite the above article.

Acceptable Use Policy

Copyright © 2003 Thomson ISI

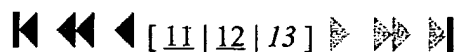
**Citing Articles--Summary****Fluorination of single-wall carbon nanotubes**

Mickelson ET, Huffman CB, Rinzler AG, et al.

CHEMICAL PHYSICS LETTERS

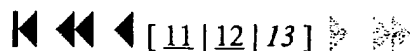
296 (1-2): 188-194 OCT 30 1998

These documents in the database cite the above article:

**Results Page 13 (Articles 121 -- 121):**

Use the checkboxes to add individual articles to the Marked List. Be sure to click **SUBMIT MARKS** button before leaving page.

- ☒ Colbert DT, Smalley RE
Fullerene nanotubes for molecular electronics
TRENDS BIOTECHNOL 17 (2): 46-50 FEB 1999

**Results Page 13 (Articles 121 -- 121):**



Cited References--Full Record

Article 1 of 1

☒ UNMARK

HOLDINGS

Author
Biography

Solvation of fluorinated single-wall carbon nanotubes in alcohol solvents
 Mickelson ET, Chiang IW, Zimmerman JL, Boul PJ, Lozano J, Liu J, Smalley RE, Hauge RH,
 Margrave JL
JOURNAL OF PHYSICAL CHEMISTRY B
 103 (21): 4318-4322 MAY 27 1999

Document
 type: Article

Language: English

Cited
References: 30

Times
Cited: 83

FIND RELATED RECORDS

Explanation**Abstract:**

Highly purified single-wall carbon nanotubes (SWNTs) were fluorinated to form "fluorotubes", which were then solvated as individual tubes in various alcohol solvents via ultrasonication. The solvation of individual fluorotubes was verified by dispersing the tubes on a mica substrate and examining them with atomic force microscopy (AFM). Elemental analysis of the tubes reveals that light sonication in alcohol solvents does not remove significant amounts of the fluorine. While these solutions are metastable, they will persist long enough (over a week) to permit solution-phase chemistry to be carried out on the fluorotubes. For example, the solvated fluorotubes can be precipitated out of solution with hydrazine to yield normal, unfluorinated SWNTs, or they can be reacted with sodium methoxide to yield what are apparently methoxylated SWNTs. These reaction products have been examined with elemental analysis and a variety of spectroscopies and microscopies.

KeyWords Plus:

RAMAN-SCATTERING, DIAMETER, PURIFICATION, ROPES

Addresses:

Margrave JL, Rice Univ, Rice Quantum Inst, MS-60,6100 Main St, Houston, TX 77005 USA
 Rice Univ, Rice Quantum Inst, Houston, TX 77005 USA
 Rice Univ, Dept Chem, Houston, TX 77005 USA
 Rice Univ, Ctr Nanoscale Sci & Technol, Houston, TX 77005 USA
 Rice Univ, Dept Phys, Houston, TX 77005 USA
 Univ Texas, Ctr Mat Chem, Dept Chem & Biochem, Austin, TX 78712 USA

Publisher:

AMER CHEMICAL SOC, 1155 16TH ST, NW, WASHINGTON, DC 20036 USA

IDS Number:

202HR

ISSN:
1089-5647

Article 1 of 1

Acceptable Use Policy

Copyright © 2003 Thomson ISI



Citing Articles--Summary

Solvation of fluorinated single-wall carbon nanotubes in alcohol solvents

Mickelson ET, Chiang IW, Zimmerman JL, et al.

JOURNAL OF PHYSICAL CHEMISTRY B

103 (21): 4318-4322 MAY 27 1999

These documents in the database cite the above article:

SUBMIT MARKS

MARK PAGE

MARK ALL

Results Page 1 (Articles 1 -- 10):

◀ ◀ ◀ [1 | 2 ... ▶ ▶ ▶

Use the checkboxes to add individual articles to the Marked List. Be sure to click SUBMIT MARKS button before leaving page.

☐ Seo K, Kim C, Choi YS, et al.

Tuning chirality of single-wall carbon nanotubes by selective etching with carbon dioxide

J AM CHEM SOC 125 (46): 13946-13947 NOV 19 2003

☐ Marquis FDS

Fully integrated hybrid polymeric carbon nanotube composites

MATER SCI FORUM 437-4: 85-88 2003

☐ Jaffe RL

Quantum chemistry study of fullerene and carbon nanotube fluorination

J PHYS CHEM B 107 (38): 10378-10388 SEP 25 2003

☐ Park KA, Choi YS, Lee YH, et al.

Atomic and electronic structures of fluorinated single-walled carbon nanotubes

PHYS REV B 68 (4): Art. No. 045429 JUL 15 2003

☐ Park S, Srivastava D, Cho K

Generalized chemical reactivity of curved surfaces: Carbon nanotubes

NANO LETT 3 (9): 1273-1277 SEP 2003

☐ Tasis D, Tagmatarchis N, Georgakilas V, et al.

Soluble carbon nanotubes

CHEM-EUR J 9 (17): 4001-4008 SEP 5 2003

☐ Lee JY, An KH, Heo JK, et al.

Fabrication of supercapacitor electrodes using fluorinated single-walled carbon nanotubes

J PHYS CHEM B 107 (34): 8812-8815 AUG 28 2003

☐ Zhu J, Kim JD, Peng HQ, et al.

Improving the dispersion and integration of single-walled carbon nanotubes in epoxy composites

through functionalization

NANO LETT 3 (8): 1107-1113 AUG 2003

☐ Wu W, Zhang S, Li Y, et al.

PVK-modified single-walled carbon nanotubes with effective photoinduced electron transfer
MACROMOLECULES 36 (17): 6286-6288 AUG 26 2003

☐ de la Torre G, Blau W, Torres T

A survey on the functionalization of single-walled nanotubes. The chemical attachment of phthalocyanine moieties
NANOTECHNOLOGY 14 (7): 765-771 JUL 2003

SUBMIT MARKS

MARK PAGE

MARK ALL

Results Page 1 (Articles 1 – 10):

⏮ ⏪ ⏩ ⏭ [1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9] ⏮ ⏭ ⏭

83 of 16,854,605 documents in the database cite the above article.

Acceptable Use Policy

Copyright © 2003 Thomson ISI



Citing Articles--Summary

Solvation of fluorinated single-wall carbon nanotubes in alcohol solvents

Mickelson ET, Chiang IW, Zimmerman JL, et al.

JOURNAL OF PHYSICAL CHEMISTRY B

103 (21): 4318-4322 MAY 27 1999

These documents in the database cite the above article:

SUBMIT MARKS

MARK PAGE

MARK ALL

Results Page 2 (Articles 11 -- 20):

◀ ◁ [1|2|3|4|5|6|7|8|9] ▶ ▷ ▶▶

Use the checkboxes to add individual articles to the Marked List. Be sure to click SUBMIT MARKS button before leaving page.

- ☐ Soundarrajan P, Patil A, Dai LM
Surface modification of aligned carbon nanotube arrays for electrochemical sensing applications
J VAC SCI TECHNOL A 21 (4): 1198-1201 JUL-AUG 2003
- ☐ Rakov EG
The chemistry and application of carbons nanotubes
USP KHIM+ 70 (10): 934-973 2001
- ☐ Lin T, Bajpai V, Ji T, et al.
Chemistry of carbon nanotubes
AUST J CHEM 56 (7): 635-651 2003
- ☐ Peng HQ, Gu ZN, Liu Y, et al.
Oxidative properties and chemical stability of fluoronanotubes in matrixes of binary inorganic compounds
J NANOSCI NANOTECHNO 3 (1-2): 87-92 FEB-APR 2003
- ☐ Pehrsson PE, Zhao W, Baldwin JW, et al.
Thermal fluorination and annealing of single-wall carbon nanotubes
J PHYS CHEM B 107 (24): 5690-5695 JUN 19 2003
- ☐ Ying YM, Saini RK, Liang F, et al.
Functionalization of carbon nanotubes by free radicals
ORG LETT 5 (9): 1471-1473 MAY 1 2003
- ☐ Zhang J, Wang GL, Shon YS, et al.
Interactions of small molecules and Au nanoparticles with solubilized single-wall carbon nanotubes
J PHYS CHEM B 107 (16): 3726-3732 APR 24 2003

- ☐ Huang WJ, Fernando S, Allard LF, et al.
Solubilization of single-walled carbon nanotubes with diamine-terminated oligomeric poly (ethylene glycol) in different functionalization reactions
NANO LETT 3 (4): 565-568 APR 2003
- ☐ Lee YS, Cho TH, Lee BK, et al.
Surface properties of fluorinated single-walled carbon nanotubes
J FLUORINE CHEM 120 (2): 99-104 APR 1 2003
- ☐ Della Negra F, Meneghetti M, Menna E
Microwave-assisted synthesis of a soluble single wall carbon nanotube derivative
FULLER NANOTUB CAR N 11 (1): 25-34 2003

SUBMIT MARKS**MARK PAGE****MARK ALL****Results Page 2 (Articles 11 -- 20):**

⏮ ⏪ ⏩ ⏭ [1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9] ⏮ ⏭ ⏭

83 of 16,854,605 documents in the database cite the above article.

Acceptable Use Policy

Copyright © 2003 Thomson ISI



Citing Articles--Summary

Solvation of fluorinated single-wall carbon nanotubes in alcohol solvents

Mickelson ET, Chiang IW, Zimmerman JL, et al.

JOURNAL OF PHYSICAL CHEMISTRY B

103 (21): 4318-4322 MAY 27 1999

These documents in the database cite the above article:

SUBMIT MARKS

UNMARK PAGE

MARK ALL

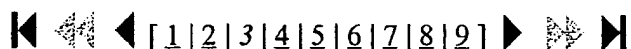
Results Page 3 (Articles 21 -- 30):

◀ ◀ ◀ [1|2|3|4|5|6|7|8|9] ▶ ▶ ▶

Use the checkboxes to add individual articles to the Marked List. Be sure to click SUBMIT MARKS button before leaving page.

- ☒ Stevens JL, Huang AY, Peng HQ, et al.
Sidewall amino-functionalization of single-walled carbon nanotubes through fluorination and subsequent reactions with terminal diamines
NANO LETT 3 (3): 331-336 MAR 2003
- ☒ Kim KS, Park KA, Kim HJ, et al.
Band gap modulation of a carbon nanotube by hydrogen functionalization
J KOREAN PHYS SOC 42: S137-S142 Suppl. S FEB 2003
- ☒ An KH, Park KA, Heo JG, et al.
Structural transformation of fluorinated carbon nanotubes induced by in situ electron-beam irradiation
J AM CHEM SOC 125 (10): 3057-3061 MAR 12 2003
- ☒ Lin Y, Taylor S, Huang WJ, et al.
Characterization of fractions from repeated functionalization reactions of carbon nanotubes
J PHYS CHEM B 107 (4): 914-919 JAN 30 2003
- ☒ Pan HL, Liu LQ, Guo ZX, et al.
Carbon nanotubols from mechanochemical reaction
NANO LETT 3 (1): 29-32 JAN 2003
- ☒ Rouse JH, Lillehei PT
Electrostatic assembly of polymer/single walled carbon nanotube multilayer films
NANO LETT 3 (1): 59-62 JAN 2003
- ☒ Reiher M, Neugebauer J
A mode-selective quantum chemical method for tracking molecular vibrations applied to functionalized carbon nanotubes
J CHEM PHYS 118 (4): 1634-1641 JAN 22 2003

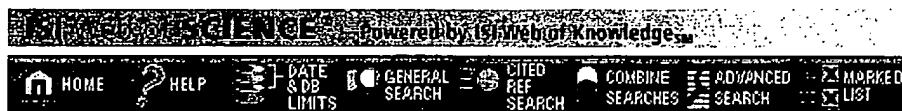
- ☒ Zhao Q, Gan ZH, Zhuang QK
Electrochemical sensors based on carbon nanotubes
ELECTROANAL 14 (23): 1609-1613 DEC 2002
- ☒ Kim KS, Bae DJ, Kim JR, et al.
Modification of electronic structures of a carbon nanotube by hydrogen functionalization
ADV MATER 14 (24): 1818-1821 DEC 17 2002
- ☒ Khabashesku VN, Billups WE, Margrave JL
Fluorination of single-wall carbon nanotubes and subsequent derivatization reactions
ACCOUNTS CHEM RES 35 (12): 1087-1095 DEC 2002

SUBMIT MARKS**UNMARK PAGE****MARK ALL****Results Page 3 (Articles 21 -- 30):**

83 of 16,854,605 documents in the database cite the above article.

Acceptable Use Policy

Copyright © 2003 Thomson ISI



Citing Articles--Summary

Solvation of fluorinated single-wall carbon nanotubes in alcohol solvents

Mickelson ET, Chiang IW, Zimmerman JL, et al.

JOURNAL OF PHYSICAL CHEMISTRY B

103 (21): 4318-4322 MAY 27 1999

These documents in the database cite the above article:

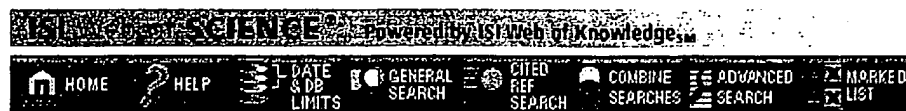
Results Page 4 (Articles 31 -- 40):

◀ ◀◀ [1|2|3|4|5|6|7|8|9] ▶▶ ▶

Use the checkboxes to add individual articles to the Marked List. Be sure to click SUBMIT MARKS button before leaving page.

- ☒ Niyogi S, Hamon MA, Hu H, et al.
Chemistry of single-walled carbon nanotubes
ACCOUNTS CHEM RES 35 (12): 1105-1113 DEC 2002
- ☒ Zhu WH, Zhu SQ, Tian H
Advances in structure modification of single wall carbon nanotubes
CHINESE J ORG CHEM 22 (12): 964-973 DEC 2002
- ☒ Basiuk EV, Rybak-Akimova EV, Basiuk VA, et al.
Adsorption modification of single-walled carbon nanotubes with tetraazaannulene macrocyclic complexes
NANO LETT 2 (11): 1249-1252 NOV 2002
- ☒ Unger E, Graham A, Kreupl F, et al.
Electrochemical functionalization of multi-walled carbon nanotubes for solvation and purification
CURR APPL PHYS 2 (2): 107-111 APR 2002
- ☒ Fu KF, Kitaygorodskiy A, Rao AM, et al.
Deuterium attachment to carbon nanotubes in solution
NANO LETT 2 (10): 1165-1168 OCT 2002
- ☒ Zhao W, Song CH, Pehrsson PE
Water-soluble and optically pH-sensitive single-walled carbon nanotubes from surface modification
J AM CHEM SOC 124 (42): 12418-12419 OCT 23 2002
- ☒ Cai LT, Bahr JL, Yao YX, et al.
Ozonation of single-walled carbon nanotubes and their assemblies on rigid self-assembled monolayers
CHEM MATER 14 (10): 4235-4241 OCT 2002

- ☒ Geng HZ, Rosen R, Zheng B, et al.
Fabrication and properties of composites of poly(ethylene oxide) and functionalized carbon nanotubes
ADV MATER 14 (19): 1387-1390 OCT 2 2002



Citing Articles--Summary

Solvation of fluorinated single-wall carbon nanotubes in alcohol solvents

Mickelson ET, Chiang IW, Zimmerman JL, et al.

JOURNAL OF PHYSICAL CHEMISTRY B

103 (21): 4318-4322 MAY 27 1999

These documents in the database cite the above article:

SUBMIT MARKS **UNMARK PAGE** **MARK ALL**

Results Page 5 (Articles 41 -- 50):

◀ ◀ ◀ [1|2|3|4|5|6|7|8|9] ▶ ▶ ▶

Use the checkboxes to add individual articles to the Marked List. Be sure to click **SUBMIT MARKS** button before leaving page.

- ☒ Kim C, Choi YS, Lee SM, et al.
The effect of gas adsorption on the field emission mechanism of carbon nanotubes
J AM CHEM SOC 124 (33): 9906-9911 AUG 21 2002
- ☒ Bahr JL, Tour JM
Covalent chemistry of single-wall carbon nanotubes
J MATER CHEM 12 (7): 1952-1958 2002
- ☒ Sinnott SB
Chemical functionalization of carbon nanotubes
J NANOSCI NANOTECHNO 2 (2): 113-123 APR 2002
- ☒ Hirsch A
Functionalization of single-walled carbon nanotubes
ANGEW CHEM INT EDIT 41 (11): 1853-1859 2002
- ☒ Touhara H, Inahara J, Mizuno T, et al.
Property control of new forms of carbon materials by fluorination
J FLUORINE CHEM 114 (2): 181-188 APR 28 2002
- ☒ An KH, Heo JG, Jeon KG, et al.
X-ray photoemission spectroscopy study of fluorinated single-walled carbon nanotubes
APPL PHYS LETT 80 (22): 4235-4237 JUN 3 2002
- ☒ Marcoux PR, Schreiber J, Batail P, et al.
A spectroscopic study of the fluorination and defluorination reactions on single-walled carbon nanotubes
PHYS CHEM CHEM PHYS 4 (11): 2278-2285 2002
- ☒ Liu LQ, Guo ZX, Dai LM, et al.

Organic modification of carbon nanotubes
CHINESE SCI BULL 47 (6): 441-447 MAR 2002

- ☒ Yudanov NF, Okotrub AV, Shubin YV, et al.
Fluorination of arc-produced carbon material containing multiwall nanotubes
CHEM MATER 14 (4): 1472-1476 APR 2002
- ☒ Huang WJ, Lin Y, Taylor S, et al.
Sonication-assisted functionalization and solubilization of carbon nanotubes
NANO LETT 2 (3): 231-234 MAR 2002

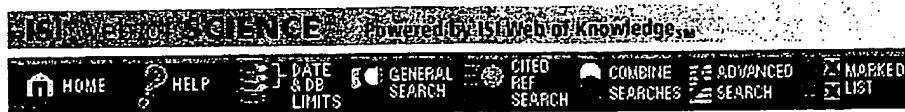
SUBMIT MARKS**UNMARK PAGE****MARK ALL****Results Page 5 (Articles 41 -- 50):**

◀ ◀◀ [1|2|3|4|5|6|7|8|9] ▶▶ ▶

83 of 16,854,605 documents in the database cite the above article.

Acceptable Use Policy

Copyright © 2003 Thomson ISI



Citing Articles--Summary

Solvation of fluorinated single-wall carbon nanotubes in alcohol solvents

Mickelson ET, Chiang IW, Zimmerman JL, et al.

JOURNAL OF PHYSICAL CHEMISTRY B

103 (21): 4318-4322 MAY 27 1999

These documents in the database cite the above article:

SUBMIT MARKS

UNMARK PAGE

MARK ALL

Results Page 6 (Articles 51 -- 60):

◀ ◀ [1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9] ▶ ▶ ▶

Use the checkboxes to add individual articles to the Marked List. Be sure to click SUBMIT MARKS button before leaving page.

- ☒ Hamon MA, Hui H, Bhowmik P, et al.
Ester-functionalized soluble single-walled carbon nanotubes
APPL PHYS A-MATER 74 (3): 333-338 MAR 2002

- ☒ Lin Y, Rao AM, Sadanadan B, et al.
Functionalizing multiple-walled carbon nanotubes with aminopolymers
J PHYS CHEM B 106 (6): 1294-1298 FEB 14 2002

- ☒ Basiuk VA, Basiuk EV, Saniger-Blesa JM
Direct amidation of terminal carboxylic groups of armchair and zigzag single-walled carbon nanotubes: A theoretical study
NANO LETT 1 (11): 657-661 NOV 2001

- ☒ Fu KF, Huang WJ, Lin Y, et al.
Defunctionalization of functionalized carbon nanotubes
NANO LETT 1 (8): 439-441 AUG 2001

- ☒ Chattopadhyay D, Lastella S, Kim S, et al.
Length separation of Zwitterion-functionalized single wall carbon nanotubes by GPC
J AM CHEM SOC 124 (5): 728-729 FEB 6 2002

- ☒ Sun YP, Zhou B, Henbest K, et al.
Luminescence anisotropy of functionalized carbon nanotubes in solution
CHEM PHYS LETT 351 (5-6): 349-353 JAN 17 2002

- ☒ Zhao W, Song CH, Zheng B, et al.
Thermal recovery behavior of fluorinated single-walled carbon nanotubes
J PHYS CHEM B 106 (2): 293-296 JAN 17 2002

- ☒ Ni B, Andrews R, Jacques D, et al.

A combined computational and experimental study of ion-beam modification of carbon nanotube bundles

J PHYS CHEM B 105 (51): 12719-12725 DEC 27 2001

☒ Bettinger HF, Kudin KN, Scuseria GE

Thermochemistry of fluorinated single wall carbon nanotubes

J AM CHEM SOC 123 (51): 12849-12856 DEC 26 2001

☒ Hamon MA, Itkis ME, Niyogi S, et al.

Effect of rehybridization on the electronic structure of single-walled carbon nanotubes

J AM CHEM SOC 123 (45): 11292-11293 NOV 14 2001

SUBMIT MARKS

UNMARK PAGE

MARK ALL

Results Page 6 (Articles 51 -- 60):

◀◀ [1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9] ▶▶▶

83 of 16,854,605 documents in the database cite the above article.

Acceptable Use Policy

Copyright © 2003 *Thomson ISI*



Citing Articles--Summary

Solvation of fluorinated single-wall carbon nanotubes in alcohol solvents

Mickelson ET, Chiang IW, Zimmerman JL, et al.

JOURNAL OF PHYSICAL CHEMISTRY B

103 (21): 4318-4322 MAY 27 1999

These documents in the database cite the above article:

SUBMIT MARKS

UNMARK PAGE

MARK ALL

Results Page 7 (Articles 61 -- 70):

◀ ◀ ◀ [1|2|3|4|5|6|7|8|9] ▶ ▶ ▶

Use the checkboxes to add individual articles to the Marked List. Be sure to click SUBMIT MARKS button before leaving page.

- ☒ Holzinger M, Vostrowsky O, Hirsch A, et al.
Sidewall functionalization of carbon nanotubes
ANGEW CHEM INT EDIT 40 (21): 4002-+ 2001
- ☒ Walther JH, Jaffe R, Halicioglu T, et al.
Carbon nanotubes in water: Structural characteristics and energetics
J PHYS CHEM B 105 (41): 9980-9987 OCT 18 2001
- ☒ Hamon MA, Hu H, Bhowmik P, et al.
End-group and defect analysis of soluble single-walled carbon nanotubes
CHEM PHYS LETT 347 (1-3): 8-12 OCT 19 2001
- ☒ Sinnott SB, Andrews R
Carbon nanotubes: Synthesis, properties, and applications
CRIT REV SOLID STATE 26 (3): 145-249 2001
- ☒ Sun YP, Huang WJ, Lin Y, et al.
Soluble dendron-functionalized carbon nanotubes: Preparation, characterization, and properties
CHEM MATER 13 (9): 2864-2869 SEP 2001
- ☒ Goldshleger NF
Fullerenes and fullerene-based materials in catalysis
FULLERENE SCI TECHN 9 (3): 255-280 2001
- ☒ Bahr JL, Yang JP, Kosynkin DV, et al.
Functionalization of carbon nanotubes by electrochemical reduction of aryl diazonium salts: A bucky paper electrode
J AM CHEM SOC 123 (27): 6536-6542 JUL 11 2001
- ☒ Dai LM, Mau AWH

Controlled synthesis and modification of carbon nanotubes and C-60: Carbon nanostructures for advanced polymer composite materials

ADV MATER 13 (12-13): 899-+ JUL 4 2001

☒ Amkreutz M, Jungnickel G, Seifert G, et al.

On the structural and electronic properties of fluorinated carbon allotropes

NEW DIAM FRONT C TEC 11 (3): 207-220 2001

☒ Chen J, Dyer MJ, Yu MF

Cyclodextrin-mediated soft cutting of single-walled carbon nanotubes

J AM CHEM SOC 123 (25): 6201-6202 JUN 27 2001

SUBMIT MARKS

UNMARK PAGE

MARK ALL

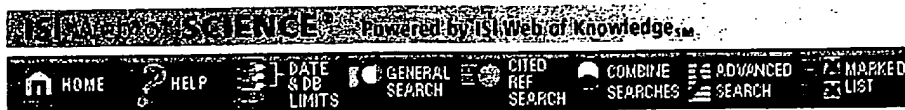
Results Page 7 (Articles 61 – 70):

◀ ◀ [1|2|3|4|5|6|7|8|9] ▶ ▶ ▶

83 of 16,854,605 documents in the database cite the above article.

Acceptable Use Policy

Copyright © 2003 *Thomson ISI*

**Citing Articles--Summary****Solvation of fluorinated single-wall carbon nanotubes in alcohol solvents**

Mickelson ET, Chiang IW, Zimmerman JL, et al.

JOURNAL OF PHYSICAL CHEMISTRY B

103 (21): 4318-4322 MAY 27 1999

These documents in the database cite the above article:

SUBMIT MARKS **UNMARK PAGE** **MARK ALL****Results Page 8 (Articles 71 -- 80):**

[1|2|3|4|5|6|7|8|9]

Use the checkboxes to add individual articles to the Marked List. Be sure to click **SUBMIT MARKS** button before leaving page.

- ☒ Star A, Stoddart JF, Steuerman D, et al.
Preparation and properties of polymer-wrapped single-walled carbon nanotubes
ANGEW CHEM INT EDIT 40 (9): 1721-1725 2001

- ☒ Rao CNR, Satishkumar BC, Govindaraj A, et al.
Nanotubes
CHEMPHYSCHEM 2 (2): 78-105 FEB 16 2001

- ☒ Sun YP, Riggs JE, Henbest KB, et al.
Nanomaterials as optical limiters
J NONLINEAR OPT PHYS 9 (4): 481-503 DEC 2000

- ☒ Chen QD, Dai LM, Gao M, et al.
Plasma activation of carbon nanotubes for chemical modification
J PHYS CHEM B 105 (3): 618-622 JAN 25 2001

- ☒ Kudin KN, Bettinger HF, Scuseria GE
Fluorinated single-wall carbon nanotubes
PHYS REV B 63 (4): Art. No. 045413 JAN 15 2001

- ☒ Niyogi S, Hu H, Hamon MA, et al.
Chromatographic purification of soluble single-walled carbon nanotubes (s-SWNTs)
J AM CHEM SOC 123 (4): 733-734 JAN 31 2001

- ☒ Gol'dshleger NF, Moravskii AP
Use of fullerenes and fullerene-containing materials in catalysis: A review
PETROL CHEM+ 40 (6): 365-377 NOV-DEC 2000

- ☒ Siska A, Konya Z, Hernadi K, et al.
Nanostructured carbon generated by chemical vapor deposition from acetylene on surfaces

pretreated by a combination of physical and chemical methods
J MATER RES 15 (10): 2087-2090 OCT 2000

☒ Ausman KD, Piner R, Lourie O, et al.

Organic solvent dispersions of single-walled carbon nanotubes: Toward solutions of pristine nanotubes

J PHYS CHEM B 104 (38): 8911-8915 SEP 28 2000

☒ Seifert G, Kohler T, Frauenheim T

Molecular wires, solenoids, and capacitors by sidewall functionalization of carbon nanotubes

APPL PHYS LETT 77 (9): 1313-1315 AUG 28 2000

SUBMIT MARKS

UNMARK PAGE

MARK ALL

Results Page 8 (Articles 71 -- 80):

⏮ ⏪ ⏩ ⏭ [1|2|3|4|5|6|7|8|9] ⏮ ⏭ ⏭

83 of 16,854,605 documents in the database cite the above article.

Acceptable Use Policy

Copyright © 2003 Thomson ISI



Citing Articles--Summary

Solvation of fluorinated single-wall carbon nanotubes in alcohol solvents

Mickelson ET, Chiang IW, Zimmerman JL, et al.

JOURNAL OF PHYSICAL CHEMISTRY B

103 (21): 4318-4322 MAY 27 1999

These documents in the database cite the above article:

SUBMIT MARKS **UNMARK PAGE** **MARK ALL**

Results Page 9 (Articles 81 -- 83):

◀ ◀ ◀ [1|2|3|4|5|6|7|8|9] ▶ ▶ ▶

Use the checkboxes to add individual articles to the Marked List. Be sure to click **SUBMIT MARKS** button before leaving page.

- ☒ Riggs JE, Guo ZX, Carroll DL, et al.
Strong luminescence of solubilized carbon nanotubes
J AM CHEM SOC 122 (24): 5879-5880 JUN 21 2000
- ☒ Ellenbogen JC, Love JC
Architectures for molecular electronic computers: 1. Logic structures and an adder designed from molecular electronic diodes
P IEEE 88 (3): 386-426 MAR 2000
- ☒ Boul PJ, Liu J, Mickelson ET, et al.
Reversible sidewall functionalization of buckytubes
CHEM PHYS LETT 310 (3-4): 367-372 SEP 3 1999

SUBMIT MARKS **UNMARK PAGE** **MARK ALL**

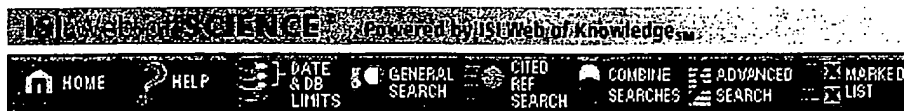
Results Page 9 (Articles 81 -- 83):

◀ ◀ ◀ [1|2|3|4|5|6|7|8|9] ▶ ▶ ▶

83 of 16,854,605 documents in the database cite the above article.

Acceptable Use Policy

Copyright © 2003 Thomson ISI



Cited References--Full Record

Article 1 of 1

☒ UNMARK

HOLDINGS

Author
Biography

Reversible sidewall functionalization of buckytubes

Boul PJ, Liu J, Mickelson ET, Huffman CB, Ericson LM, Chiang IW, Smith KA, Colbert DT, Hauge RH, Margrave JL, Smalley RE
CHEMICAL PHYSICS LETTERS
310 (3-4): 367-372 SEP 3 1999

Document type: Article **Language:** English **Cited References:** 15 **Times Cited:** 116 **FIND RELATED RECORDS** **Explanation**

Abstract:

Single-wall fullerene nanotubes have been made soluble in various organic solvents, including chloroform, methylene chloride, and tetrahydrofuran by covalently attaching alkanes to their sidewalls. Sidewall-alkylated nanotubes are obtained by reacting sidewall-fluorinated nanotubes with alkyl magnesium bromides in a Grignard synthesis or by reaction with alkyllithium precursors. Covalent attachment to the sidewalls was confirmed by W-visible spectroscopy, which is also used to show that the alkane sidewall groups can be removed by oxidizing them in air to recover pristine nanotubes. (C) 1999 Elsevier Science B.V. All rights reserved.

KeyWords Plus:

WALL CARBON NANOTUBES

Addresses:

Smalley RE, Rice Univ, Rice Quantum Inst, Dept Chem, 6100 Main St, Houston, TX 77251 USA
Rice Univ, Rice Quantum Inst, Dept Chem, Houston, TX 77251 USA
Rice Univ, Rice Quantum Inst, Dept Phys, Houston, TX 77251 USA
Rice Univ, Ctr Nanoscale Sci & Technol, Houston, TX 77251 USA

Publisher:

ELSEVIER SCIENCE BV, PO BOX 211, 1000 AE AMSTERDAM, NETHERLANDS

IDS Number:

233XN

ISSN:

0009-2614

Article 1 of 1

Acceptable Use Policy

Copyright © 2003 Thomson ISI



Citing Articles--Summary

Reversible sidewall functionalization of buckytubes

Boul PJ, Liu J, Mickelson ET, et al.

CHEMICAL PHYSICS LETTERS

310 (3-4): 367-372 SEP 3 1999

These documents in the database cite the above article:

SUBMIT MARKS

MARK PAGE

MARK ALL

Results Page 1 (Articles 1 -- 10):

1 2 ... 10

Use the checkboxes to add individual articles to the Marked List. Be sure to click SUBMIT MARKS button before leaving page.

☒ Marquis FDS

Fully integrated hybrid polymeric carbon nanotube composites

MATER SCI FORUM 437-4: 85-88 2003

☐ Zhang ZL, Horsch MA, Lamm MH, et al.

Tethered nano building blocks: Toward a conceptual framework for nanoparticle self-assembly

NANO LETT 3 (10): 1341-1346 OCT 2003

☒ Jaffe RL

Quantum chemistry study of fullerene and carbon nanotube fluorination

J PHYS CHEM B 107 (38): 10378-10388 SEP 25 2003

☐ Feng L, Li HJ, Li FY, et al.

Functionalization of carbon nanotubes with amphiphilic molecules and their Langmuir-Blodgett films

CARBON 41 (12): 2385-2391 2003

☒ Park KA, Choi YS, Lee YH, et al.

Atomic and electronic structures of fluorinated single-walled carbon nanotubes

PHYS REV B 68 (4): Art. No. 045429 JUL 15 2003

☒ Park S, Srivastava D, Cho K

Generalized chemical reactivity of curved surfaces: Carbon nanotubes

NANO LETT 3 (9): 1273-1277 SEP 2003

☒ Li RF, Shang ZF, Wang GC, et al.

Theoretical investigation on the hydrogenation of armchair single-walled carbon nanotubes

J MOL STRUC-THEOCHEM 635: 203-210 SEP 18 2003

☒ Tasis D, Tagmatarchis N, Georgakilas V, et al.

Soluble carbon nanotubes

CHEM-EUR J 9 (17): 4001-4008 SEP 5 2003

☐ Kamaras K, Itkis ME, Hu H, et al.Covalent bond formation to a carbon nanotube metal

SCIENCE 301 (5639): 1501-1501 SEP 12 2003

☒ Zhu J, Kim JD, Peng HQ, et al.Improving the dispersion and integration of single-walled carbon nanotubes in epoxy composites through functionalization

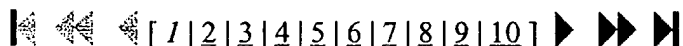
NANO LETT 3 (8): 1107-1113 AUG 2003

SUBMIT MARKS

MARK PAGE

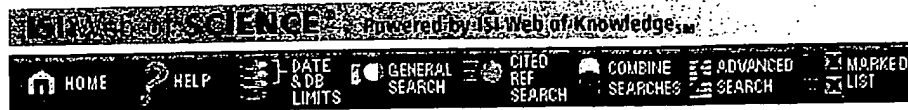
MARK ALL

Results Page 1 (Articles 1 -- 10):

 [1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10] ► ►►

116 of 16,854,605 documents in the database cite the above article.

Acceptable Use PolicyCopyright © 2003 Thomson ISI



Citing Articles--Summary

Reversible sidewall functionalization of buckytubes

Boul PJ, Liu J, Mickelson ET, et al.

CHEMICAL PHYSICS LETTERS

310 (3-4): 367-372 SEP 3 1999

These documents in the database cite the above article:

SUBMIT MARKS MARK PAGE MARK ALL

Results Page 2 (Articles 11 -- 20):

◀ ◀ ◀ [1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10] ▶ ▶ ▶

Use the checkboxes to add individual articles to the Marked List. Be sure to click SUBMIT MARKS button before leaving page.

- ☒ Wu W, Zhang S, Li Y, et al.
PVK-modified single-walled carbon nanotubes with effective photoinduced electron transfer
MACROMOLECULES 36 (17): 6286-6288 AUG 26 2003
- ☐ Asai M, Fujita N, Sano M, et al.
Silica gel fabrication of [60]fullerene aggregates and carbon nanotubes utilizing the amphiphilic nature of poly(N-vinylpyrrolidone) as a 'glue'
J MATER CHEM 13 (9): 2145-2149 2003
- ☒ Zhu WH, Minami N, Kazaoui S, et al.
Fluorescent chromophore functionalized single-wall carbon nanotubes with minimal alteration to their characteristic one-dimensional electronic states
J MATER CHEM 13 (9): 2196-2201 2003
- ☒ de la Torre G, Blau W, Torres T
A survey on the functionalization of single-walled nanotubes. The chemical attachment of phthalocyanine moieties
NANOTECHNOLOGY 14 (7): 765-771 JUL 2003
- ☒ Huang WJ, Fernando S, Lin Y, et al.
Preferential solubilization of smaller single-walled carbon nanotubes in sequential functionalization reactions
LANGMUIR 19 (17): 7084-7088 AUG 19 2003
- ☒ Kovtyukhova NI, Mallouk TE, Pan L, et al.
Individual single-walled nanotubes and hydrogels made by oxidative exfoliation of carbon nanotube ropes
J AM CHEM SOC 125 (32): 9761-9769 AUG 13 2003
- ☐ Li XL, Liu LQ, Qin YJ, et al.

C-60 modified single-walled carbon nanotubes
CHEM PHYS LETT 377 (1-2): 32-36 AUG 8 2003

- ☒ Viswanathan G, Chakrapani N, Yang HC, et al.
Single-step in situ synthesis of polymer-grafted single-wall nanotube composites
J AM CHEM SOC 125 (31): 9258-9259 AUG 6 2003
- ☒ Rakov EG
The chemistry and application of carbons nanotubes
USP KHIM+ 70 (10): 934-973 2001
- ☒ Holzinger M, Abraha J, Whelan P, et al.
Functionalization of single-walled carbon nanotubes with (R-)oxycarbonyl nitrenes
J AM CHEM SOC 125 (28): 8566-8580 JUL 16 2003

SUBMIT MARKS**MARK PAGE****MARK ALL****Results Page 2 (Articles 11 -- 20):**

◀ ◀ [1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10] ▶ ▶ ▶

116 of 16,854,605 documents in the database cite the above article.

Acceptable Use Policy

Copyright © 2003 Thomson ISI



Citing Articles--Summary
Reversible sidewall functionalization of buckytubes
Boul PJ, Liu J, Mickelson ET, et al.
CHEMICAL PHYSICS LETTERS
310 (3-4): 367-372 SEP 3 1999

These documents in the database cite the above article:

SUBMIT MARKS **MARK PAGE** **MARK ALL**

Results Page 3 (Articles 21 -- 30):

◀ ◀ ◀ [1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10] ▶ ▶ ▶

Use the checkboxes to add individual articles to the Marked List. Be sure to click SUBMIT MARKS button before leaving page.

- ☒ Lin T, Bajpai V, Ji T, et al.
Chemistry of carbon nanotubes
AUST J CHEM 56 (7): 635-651 2003
- ☒ Peng HQ, Gu ZN, Liu Y, et al.
Oxidative properties and chemical stability of fluoronanotubes in matrixes of binary inorganic compounds
J NANOSCI NANOTECHNO 3 (1-2): 87-92 FEB-APR 2003
- ☒ Pehrsson PE, Zhao W, Baldwin JW, et al.
Thermal fluorination and annealing of single-wall carbon nanotubes
J PHYS CHEM B 107 (24): 5690-5695 JUN 19 2003
- ☒ Cui JB, Burghard M, Kern K
Reversible sidewall osmylation of individual carbon nanotubes
NANO LETT 3 (5): 613-615 MAY 2003
- ☒ Ying YM, Saini RK, Liang F, et al.
Functionalization of carbon nanotubes by free radicals
ORG LETT 5 (9): 1471-1473 MAY 1 2003
- ☒ Saini RK, Chiang IW, Peng HQ, et al.
Covalent sidewall functionalization of single wall carbon nanotubes
J AM CHEM SOC 125 (12): 3617-3621 MAR 26 2003
- ☒ Della Negra F, Meneghetti M, Menna E
Microwave-assisted synthesis of a soluble single wall carbon nanotube derivative
FULLER NANOTUB CAR N 11 (1): 25-34 2003
- ☐ Matsuura K, Hayashi K, Kimizuka N

Lectin-mediated supramolecular junctions of galactose-derivatized single-walled carbon nanotubes

CHEM LETT 32 (3): 212-213 MAR 5 2003

☒ Herges R, Deichmann M, Wakita T, et al.

Synthesis of a chiral tube

ANGEW CHEM INT EDIT 42 (10): 1170-1172 2003

☒ Stevens JL, Huang AY, Peng HQ, et al.

Sidewall amino-functionalization of single-walled carbon nanotubes through fluorination and subsequent reactions with terminal diamines

NANO LETT 3 (3): 331-336 MAR 2003

SUBMIT MARKS

MARK PAGE

MARK ALL

Results Page 3 (Articles 21 -- 30):

◀ ◀ [1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10] ▶ ▶▶

116 of 16,854,605 documents in the database cite the above article.

Acceptable Use Policy

Copyright © 2003 Thomson ISI



Citing Articles--Summary

Reversible sidewall functionalization of buckytubes

Boul PJ, Liu J, Mickelson ET, et al.

CHEMICAL PHYSICS LETTERS

310 (3-4): 367-372 SEP 3 1999

These documents in the database cite the above article:

SUBMIT MARKS

MARK PAGE

MARK ALL

Results Page 4 (Articles 31 -- 40):

◀ ◀ ◀ [1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10] ▶ ▶ ▶

Use the checkboxes to add individual articles to the Marked List. Be sure to click SUBMIT MARKS button before leaving page.

- ☐ Hilding J, Grulke EA, Zhang ZG, et al.
Dispersion of carbon nanotubes in liquids
J DISPER SCI TECHNOL 24 (1): 1-41 2003
- ☒ Lin Y, Taylor S, Huang WJ, et al.
Characterization of fractions from repeated functionalization reactions of carbon nanotubes
J PHYS CHEM B 107 (4): 914-919 JAN 30 2003
- ☐ Peralta-Inga Z, Lane P, Murray JS, et al.
Characterization of surface electrostatic potentials of some (5,5) and (n,1) carbon and boron/nitrogen model nanotubes
NANO LETT 3 (1): 21-28 JAN 2003
- ☒ Pan HL, Liu LQ, Guo ZX, et al.
Carbon nanotubols from mechanochemical reaction
NANO LETT 3 (1): 29-32 JAN 2003
- ☒ Rouse JH, Lillehei PT
Electrostatic assembly of polymer/single walled carbon nanotube multilayer films
NANO LETT 3 (1): 59-62 JAN 2003
- ☐ Panhuis MIH, Maiti A, Dalton AB, et al.
Selective interaction in a polymer-single-wall carbon nanotube composite
J PHYS CHEM B 107 (2): 478-482 JAN 16 2003
- ☒ Reiher M, Neugebauer J
A mode-selective quantum chemical method for tracking molecular vibrations applied to functionalized carbon nanotubes
J CHEM PHYS 118 (4): 1634-1641 JAN 22 2003

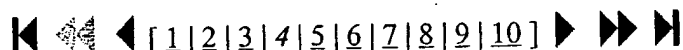
- ☐ Khare BN, Meyyappan M, Kralj J, et al.
A glow-discharge approach for functionalization of carbon nanotubes
APPL PHYS LETT 81 (27): 5237-5239 DEC 30 2002
- ☒ Zhao Q, Gan ZH, Zhuang QK
Electrochemical sensors based on carbon nanotubes
ELECTROANAL 14 (23): 1609-1613 DEC 2002
- ☒ Sano M
Toward carbon nanotube supramolecular chemistry
KOBUNSHI RONBUNSHU 59 (10): 565-570 2002

SUBMIT MARKS

MARK PAGE

MARK ALL

Results Page 4 (Articles 31 -- 40):



116 of 16,854,605 documents in the database cite the above article.

*Acceptable Use Policy**Copyright © 2003 Thomson ISI*



Citing Articles--Summary

Reversible sidewall functionalization of buckytubes

Boul PJ, Liu J, Mickelson ET, et al.

CHEMICAL PHYSICS LETTERS

310 (3-4): 367-372 SEP 3 1999

These documents in the database cite the above article:

SUBMIT MARKS

MARK PAGE

MARK ALL

Results Page 5 (Articles 41 -- 50):

◀ ◀ ◀ [1|2|3|4|5|6|7|8|9|10] ▶ ▶ ▶

Use the checkboxes to add individual articles to the Marked List. Be sure to click SUBMIT MARKS button before leaving page.

☐ Dai HJ

Carbon nanotubes: Synthesis, integration, and properties

ACCOUNTS CHEM RES 35 (12): 1035-1044 DEC 2002

☒ Khabashesku VN, Billups WE, Margrave JL

Fluorination of single-wall carbon nanotubes and subsequent derivatization reactions

ACCOUNTS CHEM RES 35 (12): 1087-1095 DEC 2002

☒ Niyogi S, Hamon MA, Hu H, et al.

Chemistry of single-walled carbon nanotubes

ACCOUNTS CHEM RES 35 (12): 1105-1113 DEC 2002

☒ Zhu WH, Zhu SQ, Tian H

Advances in structure modification of single wall carbon nanotubes

CHINESE J ORG CHEM 22 (12): 964-973 DEC 2002

☐ Banerjee S, Wong SS

Rational sidewall functionalization and purification of single-walled carbon nanotubes by solution-phase ozonolysis

J PHYS CHEM B 106 (47): 12144-12151 NOV 28 2002

☒ Kahn MGC, Banerjee S, Wong SS

Solubilization of oxidized single-walled carbon nanotubes in organic and aqueous solvents through organic derivatization

NANO LETT 2 (11): 1215-1218 NOV 2002

☒ Basiuk EV, Rybak-Akimova EV, Basiuk VA, et al.

Adsorption modification of single-walled carbon nanotubes with tetraazaannulene macrocyclic complexes

NANO LETT 2 (11): 1249-1252 NOV 2002

☒ Lu X, Tian F, Feng YB, et al.

Sidewall oxidation and complexation of carbon nanotubes by base-catalyzed cycloaddition of transition metal oxide: A theoretical prediction

NANO LETT 2 (11): 1325-1327 NOV 2002

☐ Du CS, Heldbrant D, Pan N

Preparation and preliminary property study of carbon nanotubes films by electrophoretic deposition

MATER LETT 57 (2): 434-438 DEC 2002

☐ Umek P, Vrbancic D, Remskar M, et al.

An effective surfactant-free isolation procedure for single-wall carbon nanotubes

CARBON 40 (14): 2581-2585 2002

SUBMIT MARKS

MARK PAGE

MARK ALL

Results Page 5 (Articles 41 -- 50):

⏮ ⏪ ⏩ ⏭ [1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10] ⏮ ⏭ ⏭

116 of 16,854,605 documents in the database cite the above article.

Acceptable Use Policy

Copyright © 2003 *Thomson ISI*



Citing Articles--Summary

Reversible sidewall functionalization of buckytubes

Boul PJ, Liu J, Mickelson ET, et al.

CHEMICAL PHYSICS LETTERS

310 (3-4): 367-372 SEP 3 1999

These documents in the database cite the above article:

SUBMIT MARKS **MARK PAGE** **MARK ALL**



Results Page 6 (Articles 51 -- 60):

◀ ◀ ◀ [1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10] ▶ ▶ ▶

Use the checkboxes to add individual articles to the Marked List. Be sure to click **SUBMIT MARKS** button before leaving page.

- ☒ Fu KF, Kitaygorodskiy A, Rao AM, et al.
Deuterium attachment to carbon nanotubes in solution
NANO LETT 2 (10): 1165-1168 OCT 2002
- ☒ Cai LT, Bahr JL, Yao YX, et al.
Ozonation of single-walled carbon nanotubes and their assemblies on rigid self-assembled monolayers
CHEM MATER 14 (10): 4235-4241 OCT 2002
- ☒ Nunzi F, Mercuri F, Sgamellotti A, et al.
The coordination chemistry of carbon nanotubes: a density functional study through a cluster model approach
J PHYS CHEM B 106 (41): 10622-10633 OCT 17 2002
- ☒ Gu Z, Peng H, Hauge RH, et al.
Cutting single-wall carbon nanotubes through fluorination
NANO LETT 2 (9): 1009-1013 SEP 2002
- ☒ Tagmatarchis N, Georgakilas V, Prato M, et al.
Sidewall functionalization of single-walled carbon nanotubes through electrophilic addition
CHEM COMMUN (18): 2010-2011 2002
- ☒ Basiuk VA
Activity of carboxylic groups on armchair and zigzag carbon nanotube tips: A theoretical study of esterification with methanol
NANO LETT 2 (8): 835-839 AUG 2002
- ☐ Choi HC, Shim M, Bangsaruntip S, et al.
Spontaneous reduction of metal ions on the sidewalls of carbon nanotubes
J AM CHEM SOC 124 (31): 9058-9059 AUG 7 2002

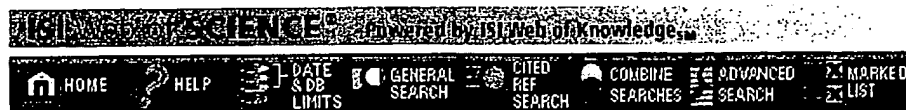
- ☐ Star A, Steuerman DW, Heath JR, et al.
Starched carbon nanotubes
ANGEW CHEM INT EDIT 41 (14): 2508-+ 2002
- ☒ Bahr JL, Tour JM
Covalent chemistry of single-wall carbon nanotubes
J MATER CHEM 12 (7): 1952-1958 2002
- ☐ Valentin E, Auvray S, Goethals J, et al.
High-density selective placement methods for carbon nanotubes
MICROELECTRON ENG 61-2: 491-496 JUL 2002

SUBMIT MARKS**MARK PAGE****MARK ALL****Results Page 6 (Articles 51 -- 60):** [1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10] 

116 of 16,854,605 documents in the database cite the above article.

Acceptable Use Policy

Copyright © 2003 Thomson ISI



Citing Articles--Summary

Reversible sidewall functionalization of buckytubes

Boul PJ, Liu J, Mickelson ET, et al.
CHEMICAL PHYSICS LETTERS
310 (3-4): 367-372 SEP 3 1999

These documents in the database cite the above article:

SUBMIT MARKS

MARK PAGE

MARK ALL

Results Page 7 (Articles 61 -- 70):

◀ ◀ ◀ [1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10] ▶ ▶ ▶

Use the checkboxes to add individual articles to the Marked List. Be sure to click SUBMIT MARKS button before leaving page.

☒ Ivanovskii AL

Non-carbon nanotubes: Synthesis and simulation
USP KHIM+ 71 (3): 203-224 2002

☒ Sinnott SB

Chemical functionalization of carbon nanotubes
J NANOSCI NANOTECHNO 2 (2): 113-123 APR 2002

☒ Hirsch A

Functionalization of single-walled carbon nanotubes
ANGEW CHEM INT EDIT 41 (11): 1853-1859 2002

☒ Touhara H, Inahara J, Mizuno T, et al.

Property control of new forms of carbon materials by fluorination
J FLUORINE CHEM 114 (2): 181-188 APR 28 2002

☐ Li RF, Shang ZF, Wang GC, et al.

Study on dichlorocarbene cycloaddition isomers of armchair single-walled carbon nanotubes
J MOL STRUC-THEOCHEM 583: 241-247 APR 19 2002

☒ Marcoux PR, Schreiber J, Batail P, et al.

A spectroscopic study of the fluorination and defluorination reactions on single-walled carbon nanotubes
PHYS CHEM CHEM PHYS 4 (11): 2278-2285 2002

☐ Sano M, Kamino A, Okamura J, et al.

Noncovalent self-assembly of carbon nanotubes for construction of "cages"
NANO LETT 2 (5): 531-533 MAY 2002

☒ Liu LQ, Guo ZX, Dai LM, et al.

Organic modification of carbon nanotubes
CHINESE SCI BULL 47 (6): 441-447 MAR 2002

☒ Kooi SE, Schlecht U, Burghard M, et al.
Electrochemical modification of single carbon nanotubes
ANGEW CHEM INT EDIT 41 (8): 1353-1355 2002

☒ Huang WJ, Lin Y, Taylor S, et al.
Sonication-assisted functionalization and solubilization of carbon nanotubes
NANO LETT 2 (3): 231-234 MAR 2002

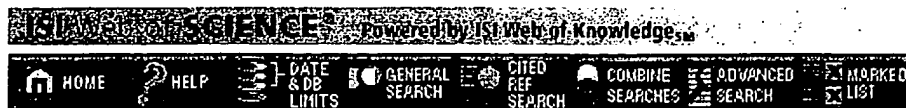
SUBMIT MARKS

MARK PAGE

MARK ALL

Results Page 7 (Articles 61 -- 70):

⏮ ⏪ ⏩ ⏭ [1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |



Citing Articles--Summary

Reversible sidewall functionalization of buckytubes

Boul PJ, Liu J, Mickelson ET, et al.

CHEMICAL PHYSICS LETTERS

310 (3-4): 367-372 SEP 3 1999

These documents in the database cite the above article:

SUBMIT MARKS

MARK PAGE

MARK ALL

Results Page 8 (Articles 71 -- 80):

◀ ◀ ◀ [1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10] ▶ ▶ ▶

Use the checkboxes to add individual articles to the Marked List. Be sure to click SUBMIT MARKS button before leaving page.

☒ Hamon MA, Hui H, Bhowmik P, et al.

Ester-functionalized soluble single-walled carbon nanotubes

APPL PHYS A-MATER 74 (3): 333-338 MAR 2002

☐ Frankland SJV, Caglar A, Brenner DW, et al.

Molecular simulation of the influence of chemical cross-links on the shear strength of carbon nanotube-polymer interfaces

J PHYS CHEM B 106 (12): 3046-3048 MAR 28 2002

☒ Ruhle M, Seeger T, Redlich P, et al.

Novel SiO_x-coated carbon nanotubes

J CERAM PROCESS RES 3 (1): 1-5 2002

☒ Lu X, Zhang LL, Xu X, et al.

Can the sidewalls of single-wall carbon nanotubes be ozonized?

J PHYS CHEM B 106 (9): 2136-2139 MAR 7 2002

☐ Bandyopadhyaya R, Nativ-Roth E, Regev O, et al.

Stabilization of individual carbon nanotubes in aqueous solutions

NANO LETT 2 (1): 25-28 JAN 2002

☒ Lin Y, Rao AM, Sadanadan B, et al.

Functionalizing multiple-walled carbon nanotubes with aminopolymers

J PHYS CHEM B 106 (6): 1294-1298 FEB 14 2002

☒ Peng HQ, Gu ZN, Yang JP, et al.

Fluorotubes as cathodes in lithium electrochemical cells

NANO LETT 1 (11): 625-629 NOV 2001

☒ Basiuk VA, Basiuk EV, Saniger-Blesa JM

Direct amidation of terminal carboxylic groups of armchair and zigzag single-walled carbon nanotubes: A theoretical study
NANO LETT 1 (11): 657-661 NOV 2001

☒ Fu KF, Huang WJ, Lin Y, et al.
Defunctionalization of functionalized carbon nanotubes
NANO LETT 1 (8): 439-441 AUG 2001

☒ Chattopadhyay D, Lastella S, Kim S, et al.
Length separation of Zwitterion-functionalized single wall carbon nanotubes by GPC
J AM CHEM SOC 124 (5): 728-729 FEB 6 2002

SUBMIT MARKS

MARK PAGE

MARK ALL

Results Page 8 (Articles 71 -- 80):

◀ ◀◀ [1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10] ▶▶ ▶

116 of 16,854,605 documents in the database cite the above article.

Acceptable Use Policy

Copyright © 2003 Thomson ISI

**Citing Articles--Summary****Reversible sidewall functionalization of buckytubes**

Boul PJ, Liu J, Mickelson ET, et al.

CHEMICAL PHYSICS LETTERS

310 (3-4): 367-372 SEP 3 1999

These documents in the database cite the above article:

SUBMIT MARKS

MARK PAGE

MARK ALL

Results Page 9 (Articles 81 – 90):

◀ ◀ ◀ [1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10] ▶ ▶ ▶

Use the checkboxes to add individual articles to the Marked List. Be sure to click SUBMIT MARKS button before leaving page.

☐ Chen J, Weimer WARoom-temperature assembly of directional carbon nanotube strings

J AM CHEM SOC 124 (5): 758-759 FEB 6 2002

☐ Georgakilas V, Kordatos K, Prato M, et al.Organic functionalization of carbon nanotubes

J AM CHEM SOC 124 (5): 760-761 FEB 6 2002

☒ Zhao W, Song CH, Zheng B, et al.Thermal recovery behavior of fluorinated single-walled carbon nanotubes

J PHYS CHEM B 106 (2): 293-296 JAN 17 2002

☒ Ni B, Andrews R, Jacques D, et al.A combined computational and experimental study of ion-beam modification of carbon nanotube bundles

J PHYS CHEM B 105 (51): 12719-12725 DEC 27 2001

☒ Bettinger HF, Kudin KN, Scuseria GEThermochemistry of fluorinated single wall carbon nanotubes

J AM CHEM SOC 123 (51): 12849-12856 DEC 26 2001

☐ Sano M, Kamino A, Shinkai SConstruction of carbon nanotube "stars" with dendrimers

ANGEW CHEM INT EDIT 40 (24): 4661-+ 2001

☒ Mews A, Jiang CY, Schuessler T, et al.Raman investigation of single oxidized carbon nanotubes

ISRAEL J CHEM 41 (1): 15-22 2001

☐ Zhao B, Hu H, Niyogi S, et al.

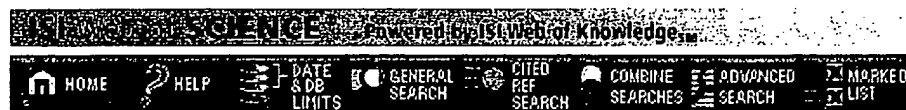
Chromatographic purification and properties of soluble single-walled carbon nanotubes
J AM CHEM SOC 123 (47): 11673-11677 NOV 28 2001

☐ Bahr JL, Tour JM

Highly functionalized carbon nanotubes using in situ generated diazonium compounds
CHEM MATER 13 (11): 3823-+ NOV 2001

☒ Holzinger M, Vostrowsky O, Hirsch A, et al.

Sidewall functionalization of carbon nanotubes
ANGEW CHEM INT EDIT 40 (21): 4002-+ 2001



**Citing Articles--Summary****Reversible sidewall functionalization of buckytubes**

Boul PJ, Liu J, Mickelson ET, et al.

CHEMICAL PHYSICS LETTERS

310 (3-4): 367-372 SEP 3 1999



These documents in the database cite the above article:

SUBMIT MARKS**MARK PAGE****MARK ALL****Results Page 10 (Articles 91 -- 100):** [1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10] 

Use the checkboxes to add individual articles to the Marked List. Be sure to click SUBMIT MARKS button before leaving page.

- ☒ Hamon MA, Hu H, Bhowmik P, et al.
End-group and defect analysis of soluble single-walled carbon nanotubes
CHEM PHYS LETT 347 (1-3): 8-12 OCT 19 2001
- ☒ Sun YP, Huang WJ, Lin Y, et al.
Soluble dendron-functionalized carbon nanotubes: Preparation, characterization, and properties
CHEM MATER 13 (9): 2864-2869 SEP 2001
- ☐ Kong J, Chapline MG, Dai HJ
Functionalized carbon nanotubes for molecular hydrogen sensors
ADV MATER 13 (18): 1384-1386 SEP 14 2001
- ☐ Chiang IW, Brinson BE, Huang AY, et al.
Purification and characterization of single-wall carbon nanotubes (SWNTs) obtained from the gas-phase decomposition of CO (HiPco process)
J PHYS CHEM B 105 (35): 8297-8301 SEP 6 2001
- ☐ Sano M, Kamino A, Okamura J, et al.
Self-organization of PEO-graft-single-walled carbon nanotubes in solutions and Langmuir-Blodgett films
LANGMUIR 17 (17): 5125-5128 AUG 21 2001
- ☒ Bahr JL, Yang JP, Kosynkin DV, et al.
Functionalization of carbon nanotubes by electrochemical reduction of aryl diazonium salts: A bucky paper electrode
J AM CHEM SOC 123 (27): 6536-6542 JUL 11 2001
- ☐ O'Connell MJ, Boul P, Ericson LM, et al.
Reversible water-solubilization of single-walled carbon nanotubes by polymer wrapping
CHEM PHYS LETT 342 (3-4): 265-271 JUL 13 2001

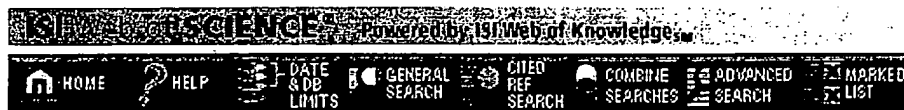
- ☒ Chen J, Dyer MJ, Yu MF
Cyclodextrin-mediated soft cutting of single-walled carbon nanotubes
J AM CHEM SOC 123 (25): 6201-6202 JUN 27 2001
- ☐ Mitchell DR, Brown RM, Spires TL, et al.
The synthesis of megatubes: New dimensions in carbon materials
INORG CHEM 40 (12): 2751-2755 JUN 4 2001
- ☒ Seeger T, Redlich P, Grobert N, et al.
SiO_x-coating of carbon nanotubes at room temperature
CHEM PHYS LETT 339 (1-2): 41-46 MAY 4 2001

SUBMIT MARKS**MARK PAGE****MARK ALL****Results Page 10 (Articles 91 -- 100):** [1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10] 

116 of 16,854,605 documents in the database cite the above article.

Acceptable Use Policy

Copyright © 2003 Thomson ISI

**Citing Articles--Summary****Reversible sidewall functionalization of buckytubes**

Boul PJ, Liu J, Mickelson ET, et al.

CHEMICAL PHYSICS LETTERS

310 (3-4): 367-372 SEP 3 1999

These documents in the database cite the above article:

SUBMIT MARKS**MARK PAGE****MARK ALL****Results Page 11 (Articles 101 -- 110):**

Use the checkboxes to add individual articles to the Marked List. Be sure to click SUBMIT MARKS button before leaving page.

- ☒ Star A, Stoddart JF, Steuerman D, et al.
Preparation and properties of polymer-wrapped single-walled carbon nanotubes
ANGEW CHEM INT EDIT 40 (9): 1721-1725 2001
- ☐ Chen RJ, Zhan YG, Wang DW, et al.
Noncovalent sidewall functionalization of single-walled carbon nanotubes for protein immobilization
J AM CHEM SOC 123 (16): 3838-3839 APR 25 2001
- ☒ Rao CNR, Satishkumar BC, Govindaraj A, et al.
Nanotubes
CHEMPHYSICHEM 2 (2): 78-105 FEB 16 2001
- ☐ Walters DA, Casavant MJ, Qin XC, et al.
In-plane-aligned membranes of carbon nanotubes
CHEM PHYS LETT 338 (1): 14-20 APR 13 2001
- ☐ Chen J, Rao AM, Lyuksyutov S, et al.
Dissolution of full-length single-walled carbon nanotubes
J PHYS CHEM B 105 (13): 2525-2528 APR 5 2001
- ☒ Sun YP, Riggs JE, Henbest KB, et al.
Nanomaterials as optical limiters
J NONLINEAR OPT PHYS 9 (4): 481-503 DEC 2000
- ☐ Chiang IW, Brinson BE, Smalley RE, et al.
Purification and characterization of single-wall carbon nanotubes
J PHYS CHEM B 105 (6): 1157-1161 FEB 15 2001
- ☒ Kudin KN, Bettinger HF, Scuseria GE

Fluorinated single-wall carbon nanotubes

PHYS REV B 63 (4): Art. No. 045413 JAN 15 2001

☒ Niyogi S, Hu H, Hamon MA, et al.Chromatographic purification of soluble single-walled carbon nanotubes (s-SWNTs)

J AM CHEM SOC 123 (4): 733-734 JAN 31 2001

☐ Tsui R, Siragusa L, Goronkin HCMOS and beyond

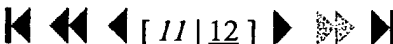
CR ACAD SCI IV-PHYS 1 (7): 875-883 SEP 2000

SUBMIT MARKS

MARK PAGE

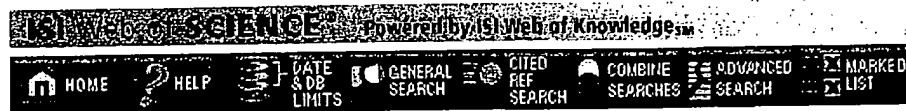
MARK ALL

Results Page 11 (Articles 101 -- 110):

 [11 | 12]

116 of 16,854,605 documents in the database cite the above article.

Acceptable Use PolicyCopyright © 2003 Thomson ISI

**Citing Articles--Summary****Reversible sidewall functionalization of buckytubes**

Boul PJ, Liu J, Mickelson ET, et al.

CHEMICAL PHYSICS LETTERS

310 (3-4): 367-372 SEP 3 1999

These documents in the database cite the above article:

SUBMIT MARKS**MARK PAGE****MARK ALL****Results Page 12 (Articles 111 -- 116):**

◀ ◀ ◀ [11 | 12] ▶ ▶ ▶

Use the checkboxes to add individual articles to the Marked List. Be sure to click SUBMIT MARKS button before leaving page.

☒ Ausman KD, Piner R, Lourie O, et al.Organic solvent dispersions of single-walled carbon nanotubes: Toward solutions of pristine nanotubes

J PHYS CHEM B 104 (38): 8911-8915 SEP 28 2000

☒ Seifert G, Kohler T, Frauenheim TMolecular wires, solenoids, and capacitors by sidewall functionalization of carbon nanotubes

APPL PHYS LETT 77 (9): 1313-1315 AUG 28 2000

☒ Riggs JE, Guo ZX, Carroll DL, et al.Strong luminescence of solubilized carbon nanotubes

J AM CHEM SOC 122 (24): 5879-5880 JUN 21 2000

☒ Bauschlicher CWHydrogen and fluorine binding to the sidewalls of a (10,0) carbon nanotube

CHEM PHYS LETT 322 (3-4): 237-241 MAY 19 2000

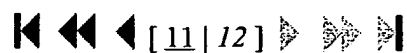
☐ Zimmerman JL, Bradley RK, Huffman CB, et al.Gas-phase purification of single-wall carbon nanotubes

CHEM MATER 12 (5): 1361-1366 MAY 2000

☒ Ellenbogen JC, Love JCArchitectures for molecular electronic computers: 1. Logic structures and an adder designed from molecular electronic diodes

P IEEE 88 (3): 386-426 MAR 2000

SUBMIT MARKS**MARK PAGE****MARK ALL****Results Page 12 (Articles 111 -- 116):**



116 of 16,854,605 documents in the database cite the above article.

Acceptable Use Policy

Copyright © 2003 Thomson ISI